Royal Ontario Museum

Thirty-Third Annual Report

July 1982 - June 1983

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Cover: The new terrace galleries building as seen from Bloor Street. In June 1983 the building housed the members' lounge, the Ming Tomb gallery, and the Discovery gallery with further gallery development underway. (Cover photograph: Bill Robertson, ROM.)

This page: Ming Tomb guardian figure.

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Report of the Board of Trustees of the Royal Ontario Museum

To His Honour, The Lieutenant Governor-in-Council:

Your Honour, you will be thrilled as we all are, to look across now at the southwest corner of Bloor Street and Avenue Road and see the new beautiful Terrace Galleries building with the Ming Tomb clearly visible by day and by night behind glass at the beautifully landscaped street level. And on a summer evening your eye may catch the umbrellas on the outdoor terrace of the fourth floor where the magnificant new Members' Lounge is located.

While only thirty per cent of our new galleries are now in place and we continue with our programme as budget will allow without compromising quality, we do have under the very able and resourceful leadership of our Vice-Chairman, Rodger E. Inglis, Q.C., of Hamilton, a gallery development recognition programme prepared by a Board committee in consultation with our Director and senior staff. This creates the opportunity for generous donors to associate themselves for all time with world-class galleries and projects within the Royal Ontario Museum.

From the opening of the main building on Friday, 24 September after almost twenty months of closure which was required for complete renovation, until the date that this report is being written and signed, 30 June 1983, more than 500 000 people from all parts of the world, have visited our new galleries and the several special exhibitions mounted in that short time. These included *The Search for Alexander* which opened in March after a successful tour of major American cities and will close on 10 July; *Treasures from the Tower of London* which opened on 19 March and closed on 19 June; and a special exhibition of Robert Bateman paintings that received wide acclaim earlier in the year.

The completely renovated main building itself, with its advanced fire detection system, modern electrical and plumbing installations, environmental controls, and adequate space for world-class galleries, plus new facilities for special exhibitions, lectures, and administration, has proven to be well planned and should serve our needs for the foreseeable future.

It warms our hearts to see the familiar yellow buses queued in front of our main building every day with an average of more than 1000 school children from all parts of the province viewing the

Photo © Tom Bauer

galleries, visiting the exhibitions, and attending special lectures. On one average day in May, for example, there were buses from Manitoulin Island, White River, Sudbury, Brampton, Niagara-on-the-Lake, Port Hope, Windsor, Burlington, Deseronto, Manitouwadge, Kapuskasing and Thunder Bay, as well as from the municipalities in Metropolitan Toronto — further evidence of the special place that the Museum has in the hearts and lives of the citizens of this province well beyond the boundaries of Metropolitan Toronto.

While all of this activity has placed tremendous strain on our resources and facilities, the greatest stress has been on members of our hard-working and dedicated staff at every level, as well as our hundreds of volunteers, without whom we could not serve the public. Yet there is an air of exhilaration throughout your Museum as we continue with the installation of new galleries and plan for more special exhibitions. *Silk Roads · China Ships*, being created by our own skilled curators and designers using our own artifacts, is scheduled to open in September 1983 and will subsequently visit leading Canadian and American cities. In June of 1984, in conjunction with the Bicentennial celebrations of the province and to mark the formal opening of the Museum, we will present a great exhibition, *Georgian Elegance and a New Land*, under the patronage of Her Majesty The Queen, that will include artifacts from the royal collections. At the same time, we are planning temporary exhibitions, pending the completion of permanent galleries, featuring some of the priceless artifacts from our own Museum collections — a new departure which, hopefully, will be continued as resources permit.

Your Board continues to be conscientious and hard working. It meets regularly in full session each month, with an unusually high average attendance. Each Board member also serves on one or more committees, which also meet on a regular schedule. The Board fully appreciates the delicate balance of responsibility under the Museum Act, with the management of the Museum, both academic and administrative, being the responsibility of the Director and his staff. While the Board, through its committees, is fully familiar with the operation of the Museum, it does not involve itself in day-to-day operations, although it does accept full responsibility for all Museum policies and activities.

We depend for major funding for normal operations and gallery development upon the provincial government to the extent of almost ninety per cent of all expenditures. The balance is made up from revenues generated directly from the public whom we serve, through admissions, food services, our renovated museum theatre, our brilliantly conceived and unique Museum shops, the Planetarium, and ancillary services. For additional and much needed discretionary funding, we rely on the resourcefulness of our own members.

During the year under review, our Members' Volunteer Committee, in addition to its work of inestimable value as docents in interpreting and guiding the public through our galleries and exhibitions, organized a brilliant Celebration Ball. It was not only a unique occasion in the social life of the community but was oversubscribed before the tickets were printed, and it is a tribute to the tact, resourcefulness, and charm of the committee that even those who were unable to attend on this occasion were understanding and generous with their approval and continued support.

Our Members' Volunteer Committee also continues to organize our World Civilization Tours, with major trips this past year to China and to Greece. They are always well planned and enjoyed by those privileged to participate, and add substantially to our revenue.

The Second Annual Run for the ROM, conceived and planned by our own staff, and led by His Excellency, The Right Honourable Roland F. Michener, an Honorary Trustee, involved more than 1000 participants. With support from members of the Museum family, and generous friends and sponsors, this event inspires *esprit de corps* within the Museum and the University community as well as raising substantial funds.

Your Board fully appreciates the importance of

membership, both as a means of involving the whole community in the life of the Museum and encouraging regular financial support at every level. Following a recent review and report of our membership, as requested by the Director, Dr. Edison J. Quick of our Board, with a strong committee, has tabled a comprehensive programme which will shortly be approved and aggressively launched.

An innovation this year was the formation of an *ad hoc* liaison committee between the Honorary Trustees and the Board, chaired by our former acting Chairman, H. Donald Guthrie, Q.C., as further evidence of the continuing interest and importance of the Honorary Trustees in the affairs of the Museum.

Gallery development continues to be brilliantly executed in an orderly fashion as budget permits. Maurice F. Anderson, Esq., is Chairman of our Gallery Development Committee, which considers recommendations from our senior staff and our curators and designers.

Our Ethics Document, a statement of principles and policies on ethics and conduct, produced by a staff committee under the Chairmanship of Miss Dorothea Hecken and including representatives of the Trustees and Honorary Trustees, has been recognized in the museum and art world as a landmark and has been adjudged as the most significant of all such known documents by the Association of Art Museum Directors. Our manual with respect to personnel policies throughout the Museum, generated by our Personnel Committee chaired by Mrs. Joan Fitzpatrick, is also in place.

Our Finance Committee, under the chairmanship of Ronald L. MacFeeters, Esq., has been dealing with the treacherous and frustrating problem of budget, with costs continuing to escalate in areas over which there is no discretionary control. Unfortunately, anticipated revenues from our special exhibitions fell short of expectations for a variety of reasons.

Miss J. Elizabeth Leitch, who is particularly competent in financial matters, again this year has been chairman of our Investment Committee.

The Director has recommended, and the Board has approved, several changes in management and procedures that will bring great strength in areas where it is much needed and we are confident that this will bring improved control to the increasingly complicated operations of our newly expanded and renovated Museum.

During the year, it has been necessary to separate our pension fund from that of the University of Toronto without prejudicing the interests of the members of our staff and we are particularly grateful to Robert M. MacIntosh, Esq., a volunteer member of our Finance Committee, who piloted that very difficult project to its conclusion as of 30 June 1983.

The Revenue Services Committee, chaired by Mrs. "Dibs" Rhind, has been concerned with the start-up of our food services and shops which are essential in serving the public. Both are operating satisfactorily and producing revenue for the Museum.

Our Communications Committee, chaired by Harold M. Turner, Jr., holds a watching brief on what we would call the "marketing" of our galleries and exhibitions, the publication of *Rotunda*, which remains an independent Museum publication of high quality, membership, and many other aspects in the programming and planning of the "new" Museum. Associated with Mr. Turner are members of staff and the Board and a number of special volunteers who lend their particular experience and expertise to us, and whose names are recorded elsewhere.

As always, Your Honour, the academic heart of the Museum remains its Collections Committee, chaired again this year by Gerald F. Levenston, M.B.E., which continues to deal with gifts from generous donors and loans to and from other institutions. In view of some unhappy experiences of other institutions and one of our own, and in the interests of our benefactors, we are urging our staff and our auditors to review all documentation at regular intervals with respect to *inter vivos* gifts which are loaned back to the donor, to satisfy ourselves as to the condition and location of the artifacts, and to be sure that the families of the donors are fully familiar with the terms and circumstances of the gift.

For budgetary reasons, we have many staff positions that still remain unfilled. Therefore, our very able Director, Dr. James E. Cruise, and his Senior Management Team and many members of our staff, have been working very hard and under great pressure and the Board would express its thanks and appreciation.

We have enjoyed the encouragement and personal interest of the Premier of the Province, The Honourable William Davis, and our Minister, The Honourable Bruce McCaffrey, and in particular we have welcomed John Latimer, Esq., as the liaison officer between the Ministry and the Museum. His personal interest and willingness to listen and to learn, have been of great help to us in day-to-day communication.

In November of this year, we were all deeply saddened by the sudden death of our trusted friend and fellow Board member, the late Warren G. Harvey, Esq.

At the end of the year, 30 June, Robert F. Boyer, Esq., having completed his first three-year term, chose not to seek reappointment and retired as a member of our Board. Mrs. "Dibs" Rhind, who had been elected by the members of the Museum for two three-year terms, and Mrs. Mary-O Rohmer and myself, having completed two terms as your appointees, now retire as required under the Museum Act. Professor James Ham, president of the University of Toronto, retires as an ex-officio member of our Board. We were very pleased when Mrs. Eve Hampson, who had completed a three-year term, was reappointed to the Board. We were particularly delighted when Mrs. Joan Thompson, who has played an important role in the life of the Museum for many years as a volunteer, was elected by the members to be a member of our Board for a three-year term. John L. Bitove, Esq. of Don Mills, and John Macdonald Douglas, Esq. of Cambridge, were both appointed as members as of 1 July 1983, with Edwin A. Goodman, O.C., Q.C., being appointed as a member and Chairman of the Board as of that same date. There is still one vacancy on the Board remaining to be filled.

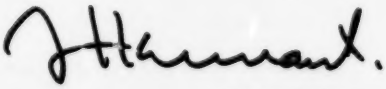
Your Honour, you would be disappointed, I know, if in my last report I did not draw attention to the fact that there seems to be little or no long-term planning for the use of space and buildings in the area of the University and the Museum.

I refer specifically to the Lillian Massey Building on the southeast corner opposite the main building of the Museum and the McMaster Building, our neighbour to the west on Bloor Street, which we believe may soon be declared redundant by the University. These should both be retained for all time for academic purposes. We are all creatures of the provincial government, serving the public of this province. With some foresight and the stroke of a pen the best use of this area can be retained by arranging for the Royal Ontario Museum to use the Lillian Massey Building, and a newly restructured and independent Royal Conservatory of Music, in the image of the Museum, continuing to be housed in the McMaster Building. The University building in which our famous Canadiana collection is now located and which is in the heart of the University campus, should be returned to the University which can more logically make use of the space.

As I close, I would express my appreciation to members of the staff and my colleagues for their never-failing courtesy, with a particular word of thanks to the Secretary of the Board, Francis J. Dunbar, Esq., renowned in museum circles throughout Canada, and serving the Board and all of its committees resourcefully, loyally, and well.

Finally, Your Honour, I would thank you for the opportunity of serving as Chairman of the Museum and would welcome my successor, Edwin A. Goodman, O.C., Q.C., an able, versatile, resourceful, and energetic young man with a unique record of service to this province and to our country in World War II, politics, industry, and the arts, an implied compliment to all of us here at the ROM.

I am all too well aware of my own shortcomings, but have done my best and am satisfied that the integrity of the Museum is intact. I look forward to the future, as we all do, with interest, confidence, and excitement.



Sydney M. Hermant
Chairman
Board of Trustees

Toronto, Ontario
30 June 1983

Director's Report to the Board of Trustees

The year 1982–83 will be remembered as the year of openings. The ROM's massive building project drew to an end and on 24 September 1982, after nearly twenty months of closure, our doors reopened to the public. In subsequent months, more galleries were opened and an exciting variety of temporary exhibitions was mounted. Openings and previews and gala fund-raising parties were held.

At the same time, plans were being laid for additional permanent galleries and for two special ROM exhibitions: *Silk Roads - China Ships* (10 September 1983–8 January 1984), which features a wide array of the ROM's outstanding treasures set in a new context, and *Georgian Elegance and a New Land: 1745-1820* (7 June–21 October 1984) mounted to celebrate the bicentennial of Ontario and to coincide with the 1984 Toronto sesquicentennial festivities. *Silk Roads - China Ships* was made possible by generous grants from the American Express Foundation.

I wish to pay tribute to all the ROM staff whose skill, dedication, and hard work made it possible to develop so many galleries and exhibitions in one year. In particular, I should mention the staff of Exhibit Design Services who are heavily involved in this aspect of the Museum's mandate.

Reopening day ceremonies, 24 September 1982. As Mr. Sydney Hermant, chairman, looks on, school children Tammy Davis and Christopher Munro and the Honourable Bruce McCaffrey cut the ribbon.

Premier William Davis's visit to the new galleries 5 October 1982; the premier is seen with Mr. Rodger Inglis (left) and Mr. Maurice Anderson (right) of the board of trustees.

Volunteers and MVC Activities

The year 1982–83 was also the year of the ROM volunteer. In response to a letter to the general membership asking for extra volunteers to work at the two international exhibitions, *The Search for Alexander* and *Treasures from the Tower of London*, 436 members answered, swelling the volunteer lists to 825. In total, 70 663 volunteer hours were recorded by the women of the Members' Volunteer Committee and the men and women of the Museum volunteers. The Museum is very grateful for their industry, enthusiasm, and continuing support. Without volunteers, the ROM as we know it could not exist.

The Members' Volunteer Committee was also deeply involved in fund-raising activities, raising $160 000 in aid of the restoration of the ROM Theatre with such evenings as the elegant Celebration Ball, 2 December 1982, and the festive opening of *Treasures from the Tower of London*, 18 March 1983. For a full report on these and such other fund-raising activities as the second "Run for the ROM", please see the building project report.

The Search for Alexander

Another gala evening marked the opening of *The Search for Alexander* in the ROM's new exhibition hall. The hosts at the 4 March 1983 black-tie dinner and champagne reception were Mr. Ralph

The Honourable John Aird greets guests at the elegant fund-raising evening, the Celebration Ball, held 2 December 1982.

Davidson, chairman of Time Inc.; and Mr. Hugh Findlay, president of Time, Canada, and his wife. *The Search for Alexander* (5 March–10 July 1983) was made possible in Canada through the generous assistance of Time Incorporated and the National Museums of Canada. We also gratefully acknowledge the cooperation of the National Bank of Greece and the Greek Ministry of Culture and Sciences. The exhibition, which featured the extraordinary art of northern Greece during the Hellenistic era, was organized by the National Gallery of Art, Washington, D.C. We were honoured to have Mrs. Katerina Rhomiopoulou, director of the Archaeological Museum of Thessalonike, and her Greek conservation team at the Museum to aid in the setting up and dismantling of the exhibition.

Treasures from the Tower of London

A second international exhibition, *Treasures from the Tower of London: An Exhibition of Arms and Armour* (19 March–19 June 1983), went on view that month with the ROM again being the exclusive Canadian host. Featuring 120 masterpieces dating from the 14th–19th centuries, the exhibition included the armours of Henry VIII and Charles II. It was a pleasure to have Mr. A.V.B. Norman, Master of the Armouries, Tower of London, and Mr. Guy Wilson, Deputy Master of the Armouries, Tower of London, at the Museum to consult in arrangements for the exhibition.

Images of the Wild, People and Places, and Other Temporary Exhibitions

A wide variety of temporary exhibitions was also on view during the year. A National Museum of Natural Sciences exhibition of Robert Bateman's wildlife paintings, *Images of the Wild Reflets de la Nature* (29 January 1982–3 April 1983), proved to be extremely popular. In the McLaughlin Planetarium exhibit area, visitors could view an exhibition circulated by the Grey Art Gallery and Study Center, New York University, *The Photography of Space Exploration* (25 September 1982–6 February 1983). That exhibition was made possible in part by a grant from Spar Aerospace Limited. At the Sigmund Samuel Canadiana Building, *People and Places: Early Canadian Paintings* (25 September 1982–25 September 1983) featured works of many artists including Krieghoff. In the main building, several other exhibitions were mounted; details of these exhibitions can be found in the programmes and public relations report.

Gallery Development

Throughout the year galleries opened in three subject areas and clusters: the Mediterranean World cluster, the life sciences cluster, and the palaeontological sciences cluster. The first of the East Asia galleries and the Discovery gallery neared completion in June 1983. For further details on gallery development, please see the building project report.

Planetarium Shows

The McLaughlin Planetarium offered six star theatre shows to the public in addition to its schedule of school shows. Subjects ranged from climatology in *The Climate Connection* to evolution in *Origins*. In conjunction with *Silk Road - China Ships*, the Planetarium will present *Stars Over China* (23 September 1983–11 December 1983), which features original photography taken in China.

Noteworthy Gifts

The following noteworthy gifts were received during 1982–83: a fine collection of slides of insects and other arthropods from Dr. W.A. Crich of Grimsby; a splendid collection of books and journals donated by Mrs. D. Burnham of Toronto; a beautifully cut 405-carat faceted topaz from Rudi and Ralph Wobito of Unionville; a fine nine-piece silver travelling canteen, English, ca. 1683 given by an anonymous donor; an extensive collection of periodicals and offprints donated by Dr. A.D. Tushingham of Toronto; seventeen lively sketches of Ontario and Quebec by Frederick Barnjum, given by Mr. Louis Melzack of Toronto; a pair of rare *ding* (cast bronze tripod bowls), from Mrs.

Wildlife artist Robert Bateman chats with Mr. Sydney Hermant, chairman, and Dr. James Cruise, director, at the preview of *Images of the Wild* 28 January 1983.

Dr. James Cruise, director, speaks with Mr. Ralph Davidson, chairman of Time Inc. (right), at the dinner and reception for *The Search for Alexander*.

Phyllis Matthews of Toronto; and The Tassie Collection of Medallions and Intaglios by Professor J. Tassie of Ottawa.

Noteworthy Publications

The staff bibliography at the back of the *Annual Report* gives a full account of the publications made by ROM staff. Publication Services produced two major works: K. Corey Keeble's *European Bronzes in the Royal Ontario Museum*, which was met by praise from the critics, and the second volume of David Pendergast's monumental *Excavations at Altun Ha, Belize, 1964–1970*.

Important Staff Changes and Staff Retirements

Every year there are staff changes and retirements, but it is with great sadness that I report the death of Mr. E.R. (Ned) Larsen, head of Development and Membership Services, in April 1983.

In June 1983, the ROM welcomed Mr. Larry R. Allen as head of Personnel Services; Mr. Allen has more than twenty years' experience in all aspects of personnel work. Miss L.M. Roe, formerly head of that department, will act as special adviser until her retirement in spring 1984.

After a busy and successful year as president of the Members' Volunteer Committee, Mrs. Betty Coatsworth stepped down as president, welcoming Mrs. Jane Tilden as the new president.

Also in June 1983 staff honoured Mr. Hugh Baldwin, service worker; Mr. Christopher John, security officer; Miss Eva Miller, secretary to the assistant director, administration and facilities; and Mr. Alan Russell, inventory control officer, carpentry shop, for their many years of dedication and service to the Museum.

Senior Management Team

Mr. C. Gordon Bristowe resigned from his position as assistant director, administration and facilities at the end of this fiscal year. Mr. Bristowe served the Museum faithfully for more than seven years. Mr. R. McCartney Samples continues with great

Members who attended the fund-raising party that opened *Treasures from the Tower of London* on 18 March 1983 were royally entertained.

The prime minister of Greece, Mr. Andreas Papandreou (left), seen with Mrs. Nedia Leipen, curator, Greek and Roman, and Ms Marie Couturier (right), director, International Programme, National Museums of Canada, on his visit to *The Search for Alexander* on 30 March 1983.

dedication in his role as assistant director, education and communication. It has been a particularly busy year for the departments and programmes for which Mr. Samples has responsibility. Mrs. Barbara Stephen continues to handle a heavy administrative load as the associate director, curatorial. Her responsibilities encompass the curatorial and curatorial service departments and the staff liaison with the collections committee. For more than six years Mr. Henry Graupner served the Museum on contract as our project director. We were delighted when, during this past year, he accepted our offer to join the permanent now staff. On 1 July 1983 Mr. Graupner assumed the title associate director, operations. To each of these past and present members of the senior management team I say a word of sincere thanks. Because of their dedication, my own job is made simple.

Board of Trustees

As a member of the staff and of the board of trustees my personal role is surely one of communication and of facilitation. It has been a pleasure for me during our reopening year to work with an outstanding group of trustees. No job has been too great or too small to be tackled, and the staff has been encouraged and inspired by the dedication of these, our most senior volunteers. All of us were saddened in November by the untimely death of one of our board members, Mr. Warren G. Harvey. Mr. Harvey had given freely of his expertise in the area of Museum insurance, and had worked with our collections, finance, investment and revenue services committees. He is greatly missed.

Mr. Sydney M. Hermant continued throughout the year to give dynamic leadership as the chairman of the board of trustees, and at 30 June it was with great reluctance that we saw Mr. Hermant exchange his chairman's title for that of "honorary trustee". For five and one-half years Mr. Hermant averaged four afternoons per week in his Museum office — a record which would be hard to match in our world of volunteerism. Mr. and Mrs. Hermant have both been extremely hospitable during this period of Museum tenure, and their gracious generosity will not be forgotten.

The now community was excited in April when Premier William G. Davis announced that the new chairman of the Museum board would be Mr. Edwin Alan Goodman, O.C., Q.C. Mr. Goodman has already had a distinguished career of public service to Ontario and Canada. We were delighted that Mr. and Mrs. Goodman were able to be present at a number of Museum functions prior to 30 June. The Museum looks ahead now to a very important period of continuing gallery development, and welcomes Mr. Goodman's leadership.

J. E. Cruise

Toronto, Ontario
26 August 1983

James E. Cruise
Director

Building Project Report

1982-83

On 24 September 1982 the Royal Ontario Museum welcomed visitors and friends to a renovated and expanded Museum. During the previous twenty months of closure and in past years, much planning, research, fund-raising, and construction were carried out to complete this complex building project.

Among the amenities now provided to visitors are the Cafe ROM, the elegant ROM Shop, the members' lounge on the top floor of the terrace galleries, and the renovated ROM Theatre. A new group entrance, complete with lockers, has also been provided for school groups.

Behind the scenes, research and gallery development were taking place in the new curatorial centre and in the modernized main building. For the first time, nearly all Museum staff were under one roof.

As the actual renovation and expansion phase drew to a close, attention was focused on the

The Royal Ontario Museum upon completion of the building project.

The 24-Hour Relay Run, 10–11 June 1983, begins at Varsity Stadium with forty-eight teams participating.

development and construction of the first of the new galleries. Eventually the new ROM will have some 19 800 m^2 of public gallery space and will be the second-largest museum building under one roof in North America, surpassed only by the Metropolitan Museum of Art in New York.

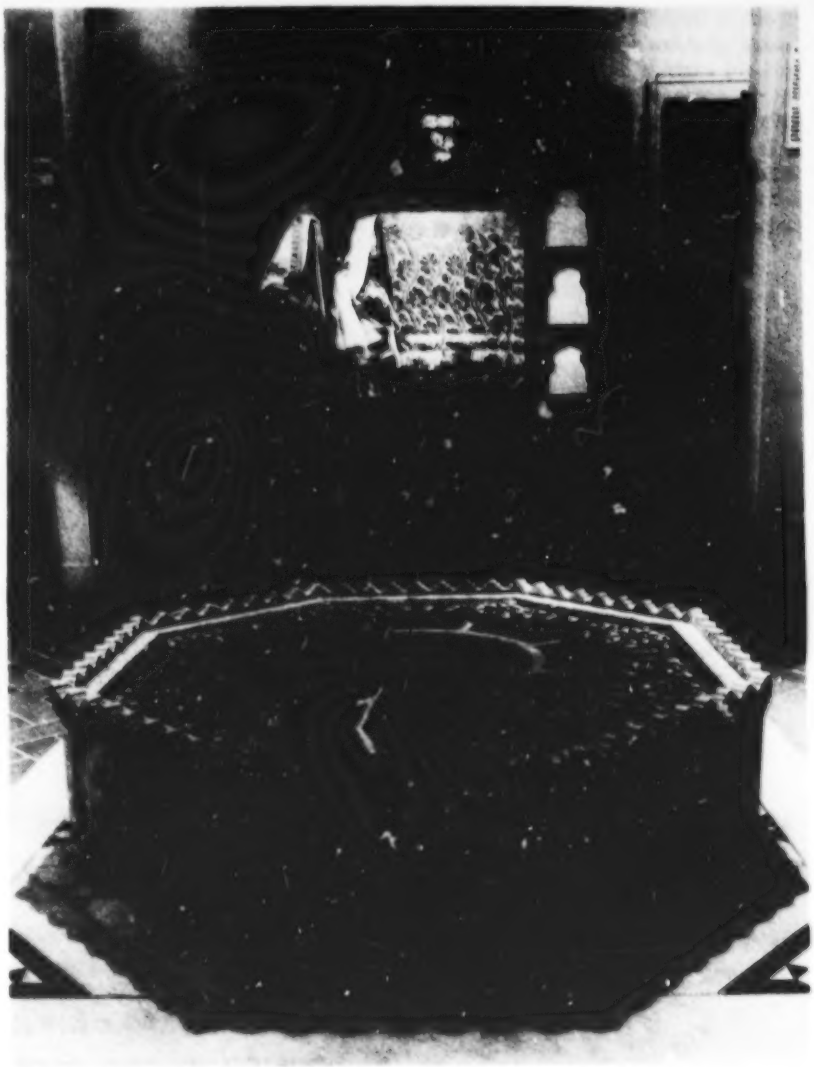
Gallery Development

In a departure from traditional gallery arrangements, collections drawn from various departments are being integrated into clusters, networks of interrelated galleries designed to illustrate conceptual and chronological links.

Galleries in three of the eight theme areas or clusters opened in September 1982. The first galleries in the life sciences cluster deal with botany, evolution, arthropods, reptiles, and invertebrates. After refurbishing, the popular dinosaur gallery opened as part of the palaeontological sciences cluster. The initial phase of the Mediterranean World cluster was put on view with surveys of the development of the early states of Mesopotamia and Egypt, the Levant, Rome and its provinces, and the long traditions of Islam.

During the course of the year more galleries opened, including the invertebrate fossils gallery, the Old World mammals gallery, the monumental Ming Tomb complex on level 1 of the terrace galleries, and an enlarged version of the Discovery Room now known as the Discovery gallery. Extensive conservation treatments on the 13th-century Chinese temple wall paintings were completed with the generous aid of The Macdonald Stewart Foundation. These magnificently restored paintings will go on view in the fall of 1983.

Gallery development teams continued to plan and design additions to the existing clusters and to develop the European, New World, Canadiana, and earth sciences clusters. Construction began on the Mankind Discovering gallery, which aims to provide an introduction to the Museum.



The courtyard setting of the Islam gallery, which is part of the Mediterranean World cluster.

Building Fund Campaign

The Museum appreciates the financial support provided by corporations, foundations, and private individuals who have made it possible to bring the renovation and expansion project to a successful conclusion. We wish to thank everyone who contributed during the year; due to limitations of space and cost, the building project donor list in this annual report lists only those who gave $100 or more in 1982–83.

As we face our second phase of fund-raising to finance the ongoing construction of galleries in our new and renovated space, it is heartwarming to know that the Museum has so many friends and supporters.

Nike/Labatt's Lite 24-Hour Relay "Run for the ROM"

With the generous support of two corporate sponsors, Nike and Labatt's Ontario Breweries, the ROM staged an extremely successful second "Run for the ROM" on 10 and 11 June 1983.

At Varsity Stadium on the U. of T. campus, 48 teams of runners amassed 9484.75 total miles and generated more than $150 000 in pledges and donations towards gallery development.

A wide assortment of new corporate, occupational, and recreational groups, including Cara Operations Ltd., C.I.L. Inc., and GM Canada, joined runners from seventeen of the teams that had taken part in Relay '82. The ROM was represented by three staff teams, a members' team, and a children's team comprised of Saturday Morning Club members. Most 1983 runners are planning to participate in Relay '84 and have pledged to raise even more funds.

Prizes, products, and services for the participants were generously supplied by more than a hundred businesses, many of them the ROM's neighbours. Mr. Ron Miles, head, Education Services, and his department again planned and executed the event with the aid of the Members' Volunteer Committee and other Museum staff, friends, and relatives.

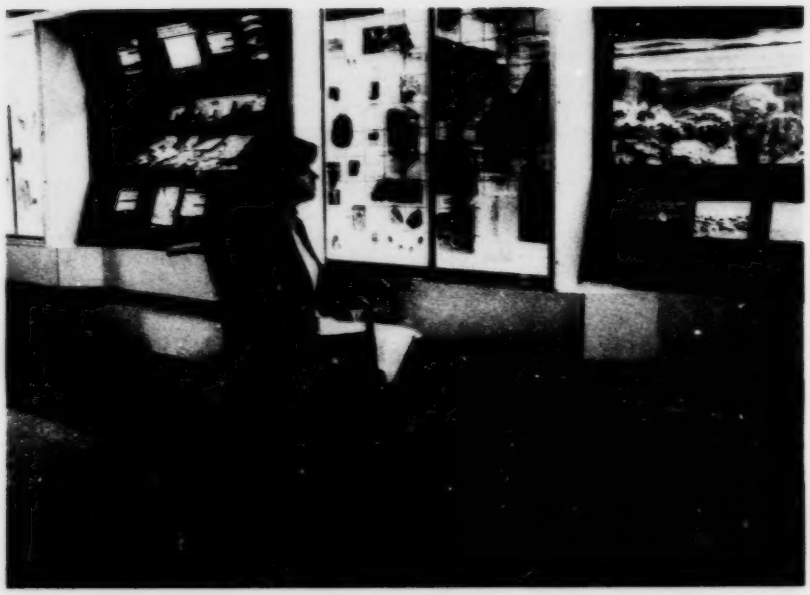
Members' Volunteer Committee Fund-Raising

The Members' Volunteer Committee raised $160 000 during the year as the second instalment of a $500 000 pledge made by the Committee to

support the Museum's ongoing development. The amount, which was raised through such revenue-producing events as the gala Celebration Ball, lectures, luncheons, and tours, brings the total funds raised over two years to $232 000.

To complete the MVC's pledge, a ROM Theatre seat sale began in June 1983. The 306 seats are for sale at a cost of $1000 each and a small brass plaque will record the generosity of each donor.

The two-year conservation project of the Bishop White gallery's Chinese temple wall paintings was assisted by the Macdonald Stewart Foundation.



Facilities for the handicapped in the ROM were made possible through a special Wintario grant.

Museum Organizational Chart

as of 30 June 1983

* Deceased

Canadiana Department

Mary Allodi

Associate Curator in Charge

A view of the south gallery with *People and Places: Early Canadian Paintings* on view.

This year, the department's reference library was relocated in a space three times the size of its former location. Its new home includes a lecture and seminar area, and two large reading tables. With the expanded shelving, each book is better housed and more easily located. The move was expertly planned and orchestrated by Miss Janet Holmes, curatorial fellow. The cost of the renovation was solely at the expense of the department.

Additional office space, also acquired through the move of other ROM departments from the Sigmund Samuel Canadiana Building to the new curatorial centre, is providing more satisfactory housing for both staff and collections. For the first time there is a study/storage space for the silver collection. The second phase in the much-needed renovation of picture storage has been delayed until sufficient funding is found.

Acquisitions

The collections were enriched by sixty-four gifts from twenty-four donors, which included silver, glass, ceramics, prints, watercolours, rare books, and furniture. Of special interest, on the eve of Ontario's bicentennial year, were the following gifts: from Miss Augusta L. Jarvis, a chair and table once owned by William Jarvis, first secretary of Upper Canada; from Mrs. S.A. Heward, a 1792 broadside proclamation by Lieutenant-Governor John Graves Simcoe; and from Mrs. Nancy Ridout Malcolm, the manuscript diary of Thomas Ridout, Surveyor-General of Upper Canada. Seventeen watercolours by Frederick S. Barnjum, the gift of Rose and Louis Melzack, added a lively series of Quebec sleighing scenes to the collections.

Purchases of sixty-three artifacts included two Chippendale-style chairs made in Montreal, and a New Brunswick washstand which originally belonged to Loyalist Edward Winslow.

Exhibitions

Colonial America: 18th-Century Views closed in September 1982. It was followed by an exhibition of oil paintings from the permanent collection, entitled *People and Places: Early Canadian Paintings*, and divided into three sections: scenes of life in Quebec province by Cornelius Krieghoff; landscapes and city views, depicting Canada from coast to coast; and a portrait gallery of early Canadians.

Throughout the year the recent acquisitions case displayed rotating exhibits of new gifts and purchases. In September 1982 a special silver display was mounted to coincide with a reception given by the Ontario Museum Association. In December the Members' Volunteer Committee decorated a Christmas tree for the Ontario Sitting Room.

During the year Mrs. Mary Allodi, associate curator in charge, and Mrs. Honor de Pencier, curatorial assistant, have been coordinating the forthcoming loan exhibition *L'art de l'architecte: Three Centuries of Architectural Drawing in Quebec City* with the Université Laval and the Musée du Québec. Miss Holmes is coordinating the exhibition *Mapping Toronto's First Century*, sponsored jointly by the Toronto Historical Board, the McLean Foundation, and the ROM, as part of Toronto's sesquicentennial celebration.

Loans

Exhibition loans were made to St. Mary's University Art Gallery, Halifax; the Agnes Etherington Art Centre of Queen's University, Kingston; the Art Gallery of St. Thomas-Elgin, St. Thomas; the Art Gallery of Nova Scotia, Halifax; The War Museum, Ottawa; Mackenzie House, Toronto; and The Market Gallery, Toronto.

Four Extension Services exhibitions from Canadiana continue to circulate, and the department has contributed artifacts to a new Extension Services exhibition, *Heirlooms: Echoes of Ontario's Past*.

Research and Field Work

Mr. Donald B. Webster, curator, continues work on Ontario's bicentennial exhibition at the ROM, *Georgian Elegance and a New Land: 1745-1820*. Miss Holmes is completing a manuscript on the 19th-century Canadian glass industry. Mrs. de Pencier is researching the work of Ontario silversmiths, and Mrs. Mary Allodi is compiling a national portrait index.

Mrs. Allodi attended the North American Print Conference in Baltimore, and visited the National Gallery of Canada and the Public Archives of Canada; she and Mrs. de Pencier visited Quebec City to study collections of paintings and silver, also in connection with a forthcoming loan

The Right Honourable Roland Michener and Corporal Duff Steele of the First Battalion, King's Royal Regiment of New York (King's Royal Yorkers), at the Sigmund Samuel Canadiana Building, for a book party given by the United Empire Loyalist Association of Canada. (Photo: Brian Willer)

exhibition. Miss Holmes attended the annual seminar on glass at Corning, New York. Mrs. Betty Pratt, technician, attended seminars given by the Costume Society of Ontario and the Ontario Museum Association. Miss Carol Baum, technician, travelled to the Nancy Island Historic Site, Wasaga Beach; the Historic Naval and Military Establishment at Penetanguishene; and Ste Marie Among the Hurons at Midland, to report on the condition of Canadiana artifacts on loan.

Teaching and Lecturing
Speakers' bureau lectures were given at Parry Sound, Belleville, Bowmanville, and at Harbourfront in Toronto by Mr. Webster and Miss Holmes; and at many Ontario centres by Mrs. Helena Ignatieff, research associate. Staff members also lectured on silver, to the Junior League; on furniture, to Sheridan College; on ceramics, to the Willow Society; and on museum careers, at Trinity College School, Port Hope. Mr. Webster gave a lecture on firearms as part of the ROM *Arms and Armour* lecture series, and various members of the department gave lectures for the ROM's autumn lecture series on *Canadiana for the Collector*.

Other Public Services
Each month an average of 232 telephone enquiries was answered, and 47 visitors, requiring information or identification of objects, were given special attention. In addition, the staff answered an uncounted number of letters of enquiry, and rotated as library supervisors.

Photographs and slides of the collections were in constant demand, 193 photos being used for research purposes; 150 for the illustration of publications; and 73 for use in documentary films, greeting cards, lectures, television, theses or display.

Appointments
Mr. Webster, curator in charge of the Province of Ontario's bicentennial exhibition, is partially detached from the Canadiana Department until 1984.

Other Events
During the summer of 1982, Miss Baum and Mrs. Karen Smith, secretary, reorganized the storage of the print collection. Mrs. de Pencier supervised the installation of replacement cases for the silver display.

During October 1982 recitals were given in the north gallery by participants in the "Youth and Music" group on International Music Day. In May 1983 the Trinity Players presented *The Baldwin Narrative*, a play based on Canadian history, in the north gallery, and the United Empire Loyalist Association of Canada gave a reception to launch a forthcoming publication, *Loyal She Remains: A Pictorial History of Ontario*.

Public attendance at the Canadiana galleries reached a total of 31 635. Of this number, 6546 were students in school classes.

Egyptian Department

Nicholas B. Millet

Curator

The year's activities in the Egyptian Department have been dominated by three events: 1) the Third International Congress of Egyptology, which met in Toronto and was sponsored by the Society for the Study of Egyptian Antiquities in conjunction with the International Association of Egyptologists, the University of Toronto, and this department; 2) the fifth and final season of surveying at the Dakhleh Oasis in the eastern Sahara, the department's joint venture with the Society for the Study of Egyptian Antiquities, under the direction of associate curator Mr. Anthony J. Mills; and 3) the relocation of the departmental offices in new quarters in the curatorial centre.

Acquisitions and Gifts
The department was fortunate to acquire a pair of fine scarabs. Each scarab embodies the name of a king of the XIII Dynasty whose existence had been doubted by historians.

A gift of more than 350 artifacts from the Dakhleh Oasis Project was presented to the Museum by Mr. Geoffrey E. Freeman, chairman of the Society for the Study of Egyptian Antiquities. A considerable number of books on Egyptology were also donated by Mr. Freeman, and numerous books of the *Medinet Habu* series were the gift of Mr. Benjamin T. Holmes of Port Dover, Ontario.

Field Work
The Dakhleh Oasis Project began its fifth season in mid-September 1982. This project received funding primarily from the Social Sciences and Humanities Research Council, and is serviced in Egypt by the Canadian Institute in Egypt, which is located in Cairo. The 1982 team consisted of such specialists as Egyptologists, an archaeozoologist, physical anthropologists, a palaeobotanist, an archaeological architect, an epigrapher, and a geochemist — an indication of the detailed study of the oasis in this, the final year of the survey.

The 1982 season of the Akhenaten Temple Project, under the direction of Dr. Donald B. Redford, research associate, resumed excavations at Karnak East.

Research
The preparation for publication of curator Dr. Nicholas B. Millet's excavations at Adda in Egyptian Nubia continued with the help of Mrs. Faith Stanley, research assistant. Dr. Millet continued his work on the decipherment of Meroitic, the language of the classical culture of the ancient Sudan, and his research on Meroitic religion. The poster wall chart on ancient Egyptian ships was

Decorated coffin excavated by the Dakhleh Oasis Project in the 1982 season, now in the Cairo Museum.

completed by the fall of 1982 by Mr. Douglas Champion, a Toronto artist, in collaboration with Dr. Millet. The Dongola Reach Survey was postponed due to continuing problems of logistics in that area of the Sudanese Nile Valley.

Mr. Mills was primarily involved in research for the Dakhleh Oasis Project with the assistance of Dr. M.M.A. MacDonald, research associate, and Mr. Alan F. Hollett, technician. Mr. Mills was also able to complete his work on *The Archaeological Survey of Sudanese Nubia*.

Mrs. Trudy Allaby, a volunteer to the department, is reconstructing the pottery from the Dakhleh Oasis. Miss Heidy Behr, through the Experience '83 programme, assisted Mr. Hollett in the film processing of the Dakhleh material. Mr. Edwin Brock, research assistant, continued to provide assistance with the departmental library. Miss Barbara Ibronyi, research assistant, aided Mrs. Annette M. Gromow, secretary, with office procedures. Volunteer Mrs. Christine Shain joined the department in September 1982 to help with the cataloguing of the collections.

Gallery Development
As in previous years, Dr. Millet and Mr. Mills were deeply involved with the planning of the Mediterranean World galleries. Work was concentrated on the Early States and Chalcolithic galleries, which opened on 24 September 1982; the department also contributed to the Mankind Discovering gallery.

Exhibitions
In conjunction with the Third International Congress of Egyptology, 5–11 September 1982, a small display of some of our finer pieces was mounted in the Sigmund Samuel Canadiana Building. Work began on the display of favourite ROM objects.

Teaching and Lecturing
Both Dr. Millet and Mr. Mills continued to teach in the Department of Near Eastern Studies, U. of T., giving both graduate and undergraduate courses.

Dr. Millet and Mr. Mills were members of the organizing committee for the Third International Congress of Egyptologists, and were interviewed by various radio and TV stations and newspapers concerning the congress. Dr. Millet, vice-chairman of the organizing committee, chaired the Meroitic Studies workshop, while Mr. Mills presented a major paper on "The Dakhleh Oasis Project — 1982 Season".

Mr. Mills presented a paper on the Dakhleh project at the annual meetings of the American Research Centre in Egypt, Inc., 22–25 April 1983, and Dr. Millet and he presented papers at the annual meeting of the Canadian Mediterranean Institute in Ottawa. In addition, Miss Winifred Needler, curator emeritus, gave papers to learned societies in Canada and the United States, while Mr. Mills gave several papers to learned societies in the United Kingdom, the United States, and Canada.

Special Events
On 31 January, during the state visit of His Excellency Mohamed Hosni Mubarak, President of the Arab Republic of Egypt, Dr. Millet attended a reception and the state dinner in honour of His Excellency. In mid-June, Dr. Millet attended the opening of the refurbished Egyptian galleries at the Metropolitan Museum of Art in New York.

Other Public Service
Identifications were a regular activity of the department, at a rate of about ten per month. The rate of inquiries was approximately forty letters a month, most of them from schoolchildren.

Mr. Anthony J. Mills, associate curator, with Mr. Alan Hollett, technician, unpacking recently acquired artifacts found by the Dakhleh Oasis Project.

Appointments
Dr. Millet was reelected to the visitors committee at the Boston Museum of Fine Arts. He again served as a member of the archaeological and research expeditions committee, and on the board of governors of the American Research Centre in Egypt, Inc. He also served on the museum committee and a search committee of the Academy of Medicine, Toronto, and as secretary-treasurer of the Oriental Club, Toronto. Mr. Mills and Dr. Millet continued their service on the board of trustees of the Society for the Study of Egyptian Antiquities, and Dr. Millet was appointed president of the Society by the newly appointed board. Both Dr. Millet and Mr. Mills continued to serve on the board of trustees for the Canadian Institute in Egypt. Dr. Millet also served on the programme committee for Egypt of the Canadian Mediterranean Institute, while Mr. Mills served on the programme committee for Egypt and the publications committee.

With deep regret we must report the resignation, for personal reasons, of Mr. Anthony J. Mills, effective 30 June 1983. That this position cannot be filled for two or three years will cause the department considerable strain and hardship.

Department of Ethnology

Edward S. Rogers

Curator in Charge

Collections
Collections were stored more safely and Indian paintings and photographs were remounted so as to better preserve the collections for the future. In the collection storage area, new cabinets now house clothing, such as that of the Plains Indians, and a few shelves are covered as an experiment to prevent possible water damage from overhead water sprinklers. In cooperation with the Conservation Department, Mr. Arni Brownstone, curatorial assistant, began to remount the Morris pastels in addition to his collections management duties. Ms Valerie Grant, research assistant technician, catalogued incoming material. Miss Joanne Schwartz, Experience '83 student, assisted Mr. Kenneth Lister, curatorial assistant, in organizing and storing our collection of historic photographs.

Loans and Photographs
A total of eight loans consisting of 111 artifacts has been organized by Mr. Lister this fiscal year, along with five renewals of forty-two artifacts from previous years. Of particular interest was the loan of eleven Paul Kane paintings and sketches to the Art Gallery of Ontario as part of the *OKanada* exhibition that travelled to Germany. As well, we were pleased to lend one George Catlin and seven Paul Kane paintings and sketches to the Winnipeg Art Gallery for the major travelling exhibition *A Distant Harmony: Comparisons in the Painting of Canada and the United States of America*. Important also was the loan of fifty-one paintings to the Thunder Bay National Exhibition Centre and Centre for Indian Art for an exhibition based upon the ROM's Department of Ethnology contemporary Native art collection.

Mrs. Helen Kilgour, departmental secretary, handled several hundred photographic requests this year. The greatest number of requests was for publications, the lesser number for research. As in past years, however, photographs of Paul Kane's works were most frequently requested.

Acquisitions
Fourteen gifts have been received by the Department of Ethnology in 1982–83, including material from Africa, Mexico, and the Eastern Woodlands and North Pacific Coast culture areas of North America.

A total of thirty-six items was acquired by purchase this fiscal year with additions being made to the contemporary Native art and Eastern Woodlands collections, including four Iroquois snowsnakes and three early paintings by Ojibwa artist Francis Kagige.

Photograph of two Gilyak women, from the Department of Ethnology Photography Collection. The semi-nomadic Gilyak people occupy the northern section of Sakhalin Island and the lower reaches of the Amur River in Eastern Siberia.

The Department of Ethnology gratefully acknowledges gifts from the following people: Mr. Arthur Budden, Ms Lilian Cookes, Mrs. Norma Etherage, Mr. Peter Kaellgren, Mr. Alex A. McArthur, Mr. William A. Shantz, and Mrs. Solveig Westman-Olsson.

Field Work and Research

During July 1982, Mr. Lister and Mr. Brian Molyneaux of the Department of New World Archaeology undertook a joint ethno-archaeological field trip to northwestern Ontario to investigate Indian rock art. Mr. Lister also delved into the Hudson's Bay Company Archives in Winnipeg seeking historical information on the Carrier Indians and the attention the company had paid to the visits of Paul Kane to their western posts. He also spent time in the Archives Deschatelets, Ottawa, continuing the quest for information on the Carrier Indians of interior British Columbia.

Mr. Basil Johnston, lecturer, continued to compile Nanabush stories, to prepare articles for future publication, and to tape elders' stories at Cape Croker, Saugeen, Wiwemikong, and West Bay. These were recorded in Ojibwa and are now being translated into English. Miss Mary Fitz-Gibbon, research assistant, worked on the Morris diaries. Mrs. Dorothy Burnham, research associate in the Textile Department, continued her detailed examination and study of the Naskapi costumes here and abroad.

Dr. Mary Black Rogers, research associate, and Ms Grant continued their investigations of the history of the Indians of northern Ontario and Manitoba. Dr. Black Rogers and Dr. E.S. Rogers, curator in charge, continued to search the Hudson's Bay Company Archives for additional information relating to these Indians. We are grateful to Mrs. Kay Hipgrave for her assistance in this work. Dr. Helmuth Fuchs, curator, continued work on the National Bibliography on Anthropology of Venezuela.

Conferences Attended

Ms Grant, Mr. Lister, Dr. Black Rogers, and Dr. E.S. Rogers attended the Second Laurier Conference on Ethnohistory and Ethnology held in London, Ontario. Mr. Johnston attended the American Indian Theological Association Conference in Rapid City, South Dakota.

Teaching and Lecturing

At the Fourteenth Algonquian Conference, Quebec City, Ms Grant gave a paper, "The Crane and Sucker Indians of Sandy Lake, 1870-1970"; and Dr. Black Rogers and Dr. E.S. Rogers delivered a paper "The Cranes and their Neighbours, 1770-1970: Trouble Case Data for Tracing We-They Boundaries of the Northern Ojibwa". Mr. Lister presented a paper, "Deaccessioning and Ethnographic Material Culture: Implications and Considerations" at the Northeast Museums Conference, Montreal. In addition, he lectured to school groups and The Saturday Morning Club on various aspects of material culture and Canadian Natives.

Mr. Johnston gave a number of talks at Victoria College; York University; Fort Frances; Winnipeg; Regina; and Ann Arbour, Michigan. Dr. E.S. Rogers

Photograph of a Nigerian woman, from the Reverend A.W. Banfield Collection. In 1902 Rev. Banfield began his life work among the native people of Africa. In addition to his primary task of preaching and translating the scriptures into the Nupe language, through photography Rev. Banfield documented the cultures of the African people leaving an important source of information for anthropologists.

continued teaching in the Department of Anthropology at McMaster University, and in addition had two Ph.D. candidates conducting research into the ethnohistory of the Indians of Garden River and Parry Island reserves. Under the premises of article 48 of the Canada-Mexico Cultural Agreement Dr. Fuchs again accepted an invitation by the National Institute of Anthropology and History in Mexico to give a field seminar on peasant markets in Chicontepec, Veracruz, during September 1982 for the students of the National School of Anthropology and History.

Other Public Service

Throughout the year hardly a day went by without one or more visitors coming to the department to seek information or to view the collections. Mr. Johnston served on the Ontario Geographic Names Board, on the board of Wigwamen Incorporated, and translated a brochure for the Toronto Board of Education. Dr. E.S. Rogers sat on the editorial advisory board of the Ministry of Natural Resources to review manuscripts prepared by the staff of the Office of Indian Resource Policy.

European Department

Heribert Hickl-Szabo

Curator

For the European Department the 1982–83 year was highlighted by deep involvement in several special exhibitions — *Treasures from the Tower of London, Silk Roads · China Ships*, and *Georgian Elegance and a New Land: 1745-1820*. Curatorial expertise was provided for the first, and objects and staff time were contributed to the two ROM-mounted exhibitions. The department also assisted in planning a display that will contain many favourites from the ROM.

In recognition of Toronto's coming sesquicentennial, Mr. Ladislav Cselenyi, associate curator, prepared a monograph on the R.S. Williams family, donors to the Museum and important in the history of music in Canada.

Mr. K. Corey Keeble was promoted to associate curator and the publication of his catalogue, *European Bronzes in the Royal Ontario Museum*, was met by praise from the critics.

Acquisitions

A fine 17th-century travelling canteen with chinoiserie decoration was donated by an anonymous donor. Other important gifts include a number of glass paperweights from Mr. J.A. Howson Brocklebank; bronze war medals from Mr. J. MacGillivray; a gold watch and chain from Mrs. Irene Seggie; and a number of portrait miniatures from Mr. Donald McLeish and Miss Vera Kellett.

The Tassie Collection, a collection of glass-paste portrait medallions and gem stones, has been on deposit in the department since 1919. Prof. J.S. Tassie of Ottawa, who recently inherited the collection, has decided to donate most of it to the Museum.

Research

Mr. Heribert Hickl-Szabo, curator, continued his research on portrait miniatures and on water-colour sketches of the Russo-Japanese war of 1904–05.

Mr. Cselenyi researched fifty icons selected for a special exhibition. He also arranged and participated in the study of twelve "pocket violins" from the collection of R.S. Williams for Dr. Margaret Downie of the University of South Dakota's Center for Study of the History of Musical Instruments.

Mr. Keeble began a study of European sculpture in stone, wood, and ivory to supplement his research on sculpture in bronze and terracotta, and made a trip to England and The Netherlands for the study of sculpture and applied arts.

Mr. Peter Kaellgren, curatorial fellow, returned from his leave of absence and began cataloguing a large collection of ceramics purchased in 1980.

A fine 17th-century travelling canteen with chinoiserie motif and silver utensils given by an anonymous donor.

With Mr. Brian Musselwhite, curatorial assistant, he prepared the documentation for the certification of the Tassie Collection.

Mr. Musselwhite continued to reorganize the collections in the new storage area and to research the collection of miniatures and the growing collection of paperweights.

Miss Mary Campbell, part-time research associate, continued work on coins in the collection, identified coins for the public on request, and has nearly completed identification and research on the department's 992 caricatures.

Exhibitions

Mr. Keeble was ROM curator for *Treasures from the Tower of London*. The department made contributions to *Silk Roads · China Ships* and to *Georgian Elegance and a New Land*, with Mr. Musselwhite acting as the department's representative for both exhibitions. Mr. Cselenyi and Mr. Hickl-Szabo selected material for a display that is to feature favourite objects from the ROM's collections. Mr. Kaellgren helped Extension Services in preparing *Heirlooms*, an exhibition to be circulated in conjunction with Ontario's bicentennial in 1984, and arranged for the loan of miniature tea and dinnerware ceramics to a special display at Mackenzie House over the Christmas season.

Gallery Development

Work proceeded on the department's first new galleries, on the medieval and Renaissance periods. Mr. Cselenyi selected objects for the section on medieval writing and printing.

Mr. Kaellgren worked on the Discovery gallery team where he contributed the ceramics study unit.

Lectures

Mr. Cselenyi lectured at the Ontario College of Art in the course "History of Prints and Printmakers".

Mr. Keeble gave lectures on topics ranging from Italian Renaissance sculpture to arms and armour, to a number of groups including the William Morris Society, the Art Gallery of Ontario, and the National Ballet School. He also participated in

Arms, Armour, and Courtly Splendour, the ROM continuing education lecture series given to complement the *Treasures from the Tower of London* exhibition.

Mr. Kaellgren delivered guest lectures at the University of Toronto on English silver and art nouveau glass, and through the ROM's speakers' bureau, he gave four talks.

Mr. Musselwhite continued his twenty-week night course, "Antiques", at Parkview Secondary School, teaching three classes of thirty students each, and participated in eight identification clinics.

Publications

Mr. Keeble's *European Bronzes in the Royal Ontario Museum*, a lavishly illustrated catalogue of the Museum's holdings of small bronze figurines, was published by the ROM. "McCausland Stained Glass", a manuscript on Canadian stained glass, has been produced by Mr. Keeble and Dr. Alice B. Hamilton.

Mr. Kaellgren compiled the Canadian section of *Glass Collections in the United States and Canada*, published by the Corning Museum of Glass. He continued his antiques column in *City & Country Home*, formerly *Home Decor Canada*. Both Mr. Kaellgren and Mr. Musselwhite had papers published in *Proceedings of the Twenty-fourth Wedgwood International Seminar*.

Other Public Service

The department continued to hold identification clinics and to offer assistance of various kinds. Mr. Henry Sandon, director-curator of the new George R. Gardiner Museum of Ceramic Art, was a regular visitor to the department and useful information on setting up museums was exchanged.

Other special visitors to the department included Mr. H.A. Crosby Forbes, Museum of the American China Trade, Milton, Massachusetts; Ms Olive Jones, National Historic Sites, Ottawa; Mr. & Mrs. A.V.B. Norman, Mr. Guy Wilson, and Dr. Sarah Bevan from The Armouries, H.M. Tower of London; Mr. Alan Borg, Imperial War Museum, London; and Mr. Ian Redstone, a well-known English authority on Bow porcelain.

Mr. Kaellgren has just finished a two-year term on the national executive of the Canadian Society of Decorative Arts and is on the executive of the Northeast Museums Conference.

Because Mr. Hickl-Szabo has been absent through illness, Mr. Cselenyi has been acting head of the department since April.

Far Eastern Department

James Hsü

Associate Curator in Charge

The popular Ming Tomb gallery, the first of the East Asian galleries, opened on 1 June 1983. In addition to the monumental Ming tomb stone sculptures and arches, a fine and rare example of a Ming three-courtyard house model, Ming tomb figures, and models of possessions were installed in the gallery, helping to illustrate more fully the concept of the Chinese ideal of a highly ordered society.

Another important event was the gift from Mrs. Phyllis Matthews of a pair of fine and rare Shang *ding*, or ritual bronze food vessels of Bronze Age China, to add to our well-known collection of archaic bronzes. This pair of vessels embodies workmanship of the highest quality, is in near-perfect condition, and bears a family "crest" never reported before.

The department contributed both objects and time to the ROM special exhibition *Silk Roads - China Ships*.

Acquisitions

Nine works have been purchased from auctions and other sources, including a Choson Korean painting on silk of a seated Buddha, a Chinese painting of squirrels by Tang Yun, a 3rd- or 4th-century Chinese celadon ewer in animal form, a Song Dynasty Chinese porcelain, and a pair of red glass carved *bi* disks. Along with the superb Shang *ding* mentioned above, twenty-seven objects have been generously donated to the department by Mrs. Janet Williams, Mr. Peter Kaellgren, Mr. George Gale, Mr. J. Hunter, and Miss Dorothy Hall.

Research

Dr. James Hsü, associate curator in charge, was the curatorial representative for the Ming Tomb gallery. Other staff members were involved in preparing future gallery displays. Dr. Hsü along with Prof. A.H.C. Ward of the East Asian Studies Department, University of Toronto, finished a lengthy manuscript, "Ancient Chinese Society: An Epigraphic and Archaeological Interpretation".

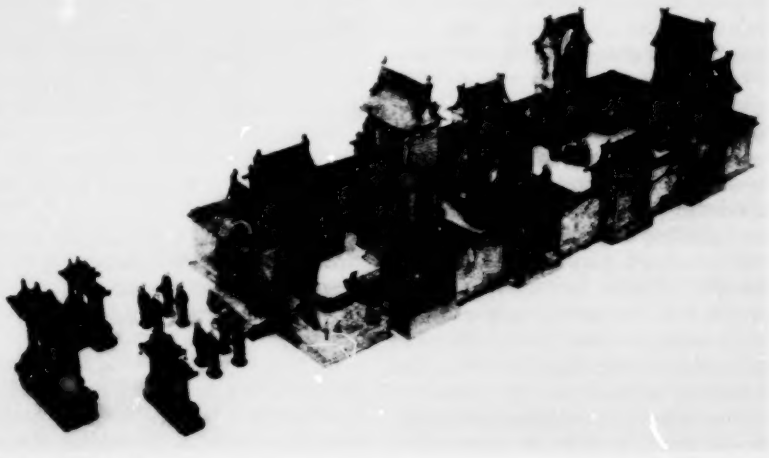
Dr. Doris Dohrenwend, associate curator, continued work on the ROM collection of Chinese bronze mirrors and also catalogued our important collection of early Chinese glass. She visited the Corning Museum of Glass in New York, and was the resource person for the ROM's second China Tour of 1982–83. Mrs. Patty Proctor, curatorial fellow, continued to catalogue our famous Chinese tomb figurines. Miss Ka Bo Tsang, curatorial assistant, continued her research on Chinese wall paintings and literati paintings from the Qing dynasty.

Mr. Hugh Wylie, research assistant, reorganized Japanese objects in the storage areas and worked on updating the Japanese slide collection. He selected Japanese Kabuki prints for the travelling exhibit *Prints of the Great Kabuki Actors*. Mr. Wylie is also working on his Ph.D. Mrs. Sara Irwin, technician, continued gathering material for the future Shang bronze gallery. She also was a liaison from this department to the *Silk Roads - China Ships* exhibition.

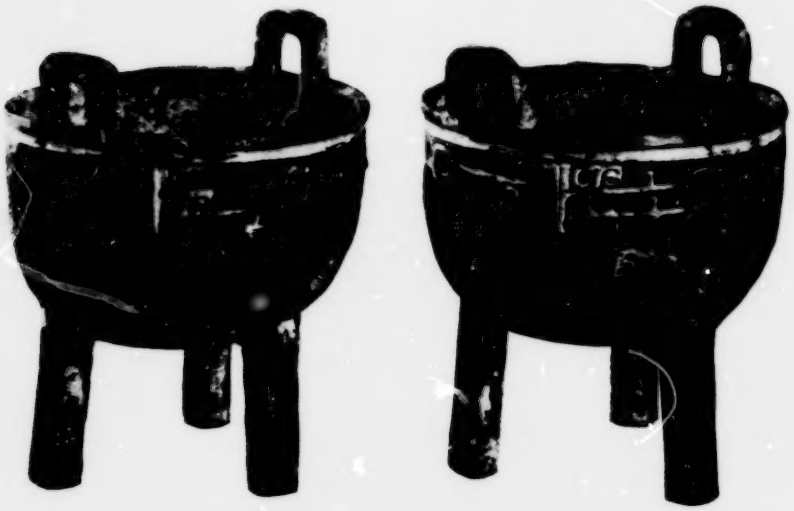
The department's new word-processing computer was first used by Dr. Hsü to store his just-finished manuscript on ancient Chinese society for future revisions. The Far Eastern Library then developed several files for office procedures and for improving reader services.

Loans

Twelve new or renewed outgoing loans of ninety-two objects have been approved this last year.



A Ming house model.



A pair of Shang bronze *ding* vessels donated by Mrs. Phyllis Matthews.

including five objects to Glendon Gallery, York University, Toronto, and two to the Biology Earth Sciences Museum, University of Waterloo, for a Canadian gem and mineral exhibition. About two hundred items were loaned internally.

Teaching and Lecturing

Dr. Hsü taught "The Written Word in Ancient China" for East Asian Studies, U. of T. He was invited by the American National Academy of Sciences to give a paper, "An Epigraphic Interpretation of Historical Stages in Ancient Chinese History", to the International Conference on Shang Civilization in Honolulu, Hawaii. He also gave a talk on Chinese legends for Prof. J.C. Ching, U. of T.

Dr. Dohrenwend gave a lecture on Chinese architecture and town planning for the fall Bishop White lecture series. She also gave two seminars, one on jade and one on glass, for David Waterhouse, U. of T., and also spoke on Chinese art and archaeology to the China-bound ROM tour group of May 1983. Mrs. Proctor gave talks to the Joseph Brant Archaeological Society on Tang China and to the Bishop White lecture series on Chinese ceramic technology. Mr. Wylie gave two lectures on Japanese prints. One was for Living and Learning in Retirement, Glendon College, Toronto, and the other was in conjunction with the travelling kabuki-actor print show at the Art Gallery of Northumberland, Cobourg, Ontario.

Library

Use of the library has been increasing steadily. On a yearly average, the library has four to five users a day in addition to ROM staff and volunteers. A total of 916 books was ordered last year, with the total collection of the Far Eastern Library now numbering more than 22 000 books. Mrs. Strong, author of *A Sketch of Chinese Arts and Crafts* (1933), donated a collection of more than 150 books to the library, many of them rare and out of print.

Other Public Services

In addition to library services, this department has provided facilities, time, and expertise to a great number of people from Canada and abroad. A total of 172 appointments was scheduled for the identification service. There were also roughly 117 casual identifications and answers to letters of inquiry on a wide range of topics. The collections also attracted more than forty distinguished scholars, dealers, and collectors from China, Japan, the United States, England, France, Sweden, Australia, Taiwan, and Singapore during the past year as well as two Canadian film crews.

Staff Changes

Mrs. Nancy Pat, departmental secretary, resigned after her baby was born, and she was replaced by Miss Hilda Chan. Ms Jeannie Parker was contracted as technician to help work on the new galleries and on the extensive slide collection.

Mr. Jack Howard took over as the head of the library after the retirement of Miss Betty Kingston. Then Mrs. C. Tang left her job as library technician, and was replaced by Mr. Shyh-charng Lo. Ten diligent volunteers have helped to keep the library functioning smoothly.

Dr. Chai-shin Yu, professor of Korean language and culture, East Asian Studies, U. of T., was appointed as research associate.

Greek and Roman Department

Neda Leipen

Curator in Charge

Two events highlighted the year: the reopening of the Roman Imperial galleries in the fall and the exhibition *The Search for Alexander* in the spring. The preparations for the exhibition involved the resources of the department for many months and culminated in the opening ceremonies at the beginning of March 1983. Toward the end of March the exhibition was visited by Mr. A. Papandreou, the prime minister of Greece, and many other Greek and Canadian dignitaries, who were guided through the exhibits by Mrs. Neda Leipen, curator in charge. Among the events that took place in conjunction with the exhibition was a lecture-discussion series and a symposium, both organized and coordinated by Mrs. Leipen and presented by the Museum. Like the exhibition itself, both of these events were received with widespread public interest.

The six-week, illustrated lecture-discussion series, *Alexander the Great: His Time and His Legacy*, attracted a record attendance. The symposium, with papers on *The Continuity of the Alexander Legend* given by Canadian and international scholars, was a well-attended academic event, staged in cooperation with the University of Toronto School of Graduate Studies (SGS). Our special thanks go to the University of Toronto Research Board for a grant toward the staging of the symposium and to the Department of History of Art, U. of T., for its interest, advice, encouragement, and financial support.

Another important event was the return of some staff members who had been temporarily housed off-site. After almost three years on Scollard Street and in the Sigmund Samuel Canadiana Building respectively, Mrs. Alison Easson, assistant curator, and Dr. John W. Hayes, curator, have rejoined the rest of the department in their new offices and workrooms in the curatorial centre and the south-west annex.

Galleries and Collections

The Roman Imperial galleries located on level 3 were opened in September 1983. The displays, some showing themes from daily life, others presenting integrated cultural pictures of Rome and its many provinces, have drawn favourable and gratifying comments by visitors. In particular, the Education Services teachers and outside teachers conducting their students have found the displays very helpful.

The curators continued working on plans for the Greek galleries for which they made a selection

Mrs. Neda Leipen, curator, escorting Mr. Andreas Papandreou, prime minister of Greece, through *The Search for Alexander* 30 March 1983 with Dr. James Cruise, director, looking on.

of objects and determined their grouping. They also selected objects for the Greek component of the projected temporary display of highlights from the ROM's collections.

The collections were studied and the resources of the department used by a number of visiting Canadian and international scholars, including colleagues from Germany, Italy, Austria, Switzerland, The Netherlands, and the United States.

Acquisitions

We are grateful to Prof. Elisabeth Rosenbaum Alföldi for a donation of thirteen Greek objects, mainly pottery. We thank Mr. and Mrs. H.D. Manning for a donation of five objects, all of Greek origin, from southern Italy; Mrs. Hazel Killingsworth Brown for ten Greek and Cypriot pieces, mainly pottery; Mr. Robert E. Hindley for a silver drachm of Menander of Bactria; Dr. W. Otto for a Gnathia cup; and Mr. John L. Russell for a Hellenistic gold ornament. Two Roman terracotta figures of puppets with moveable legs from the eastern provinces of the empire, and a pair of Late Antique or Early Byzantine gold earrings, were among the more significant purchases.

Exhibitions

Mrs. Leipen was the curatorial representative on the planning and design team for *The Search for Alexander* exhibition. She and Mrs. Easson selected additional objects from the Museum's collections to be included in the exhibition. About three dozen of these objects, including coins, terracotta figurines, gold jewellery, and sculpture, some from private collections in Toronto, were published by Mrs. Leipen and Mrs. Easson in the Toronto supplement to the exhibition catalogue.

A view of Roman galleries with exhibits illustrating funerary customs in Rome and the provinces. The mural, painted by Sylvia Hahn, shows a street scene in Pompeii.

Teaching and Lecturing

Dr. Hayes spent a year's leave of absence as visiting professor at the University of British Columbia where he taught classics and Roman archaeology for the 1982–83 academic year. In conjunction with *The Search for Alexander*, Mrs. Leipen gave an illustrated lecture in the continuing education series, speaking on "Gods and People: Sculptors' Renditions", and Mrs. Easson lectured on "Gods and Kings: Portraits of Alexander and His Successors". The curatorial staff, including Mr. Paul Denis, research assistant, also gave numerous popular talks on Alexander and the Toronto exhibition to various community groups and clubs. Mrs. Leipen also gave television and radio interviews related to the exhibition.

Field Work, Research, Study, and Travel

Pursuing her comparative studies of Roman pottery from Britain in preparation for publication of ROM holdings, Mrs. Easson spent two weeks in England, while Dr. Hayes spent the summer at various Greek sites as expert and consultant for pottery finds. Among other sites in Greece and Italy he worked primarily at the ROM-supported field projects Kommos and Knossos in Crete, directed by Dr. J. Shaw of the U. of T. and the late Prof. M. Gough of the Pontifical Institute of Medieval Studies respectively. Mrs. Leipen and Mr. Denis attended the preview opening of *The Search for Alexander* at the Metropolitan Museum of Art in New York, the last stop on the exhibition's tour before Toronto. Mrs. Leipen and Mr. Wilfred Boroskie, technician, visited and studied *The Vatican Collections: The Papacy and Art* exhibition also at the Metropolitan Museum of Art, which comprised a large number of classical pieces, and in particular, marble sculpture. Mrs. Leipen also spent some time in the research library of the Institute for Advanced Study in Princeton.

Public Service

Mrs. Leipen and Mrs. Easson gave talks on *The Search for Alexander* to Members' Volunteer Committee docents preparing tours for the public, and vetted their scripts. Mrs. Easson spoke on ancient Greek coinage in the Living and Learning in Retirement course at Glendon College, York University. Mr. Denis spoke to various groups on *The Search for Alexander* and gave talks in the galleries.

More than 600 various ancient objects brought in by the public were examined and identified by curatorial staff. In addition, several large private collections were examined on the spot.

Grants

Mrs. Leipen received a grant from the University of Toronto Research Board as an assistance toward the ROM SGS co-sponsored symposium in conjunction with *The Search for Alexander* exhibition.

Department of New World Archaeology

Peter L. Storck

Associate Curator in Charge

Foremost among the activities of the Department of New World Archaeology during the past year was our move into new facilities at the ROM on 27 September 1982. As one of the first departments to be relocated in preparation for renovation and expansion, we had been working at an off-site location for five years. Our move not only reunited us with the rest of the ROM, but also allowed us to house the staff and collections together in one building for the first time.

Under the guidance of Miss Peta Daniels, technician, the monumental task of rehousing our collections is now nearing completion, and we are grateful for the assistance of Ms Susan Corrigan, preparator, whose work in this department has greatly facilitated the process.

Field Work and Research

Dr. David M. Pendergast, curator, completed the tenth season of excavations at Lamanai, Belize, late in June. Work this year focused on Postclassic and early Historic occupation at the site, spanning the centuries from about AD 1100 to AD 1675–1700. In the southern site centre, excavation also revealed several carved monuments of Classic date, including a major stela in almost pristine condition, with a hieroglyphic text that indicates a date in the 7th century. Two Spanish churches have now been identified south of the site centre. Work in this area yielded numerous pottery-vessel offerings of the 16th and 17th centuries, and the burial of a major figure in Lamanai's ruling group during the late 15th and early 16th centuries. It is hoped that excavations will continue in 1984, scheduled to be the last year of digging at what has proved to be a highly important ancient Maya centre.

In addition to continuing his research on the Early Palaeo-Indian Fisher site, Dr. Peter L. Storck, associate curator in charge, completed a second surface collection at the site of a Paleo-Indian workshop where stone tools were manufactured 10 000 to 12 000 years ago. The site was discovered near Collingwood in 1982.

Dr. Mima Kapches, assistant curator, directed the Boyd Conservation Field Centre Archaeological Field School for the Metropolitan and Toronto Region Conservation Authority. High school students participating in the field school excavated remains of an Iroquoian village at the Mackenzie site. In preparation for a long-term research project in the Prince Edward County area of Ontario, Dr. Kapches also studied collections from the area at the Rochester Museum and Science Centre and the State Museum of New York in Albany, and at the Hastings County Museum in Ontario.

Mr. Brian Molyneaux, field associate, continued the recording and excavation of rock art sites in the Lake of the Woods area of northern Ontario.

Miss Rita Granda, graphic artist, enjoyed several sessions of instruction from Mrs. Mary Hurley, an expert in the art of drawing prehistoric stone tools.

Gallery Development

In September 1982 Dr. Kapches, Mr. Molyneaux, and Miss Lisa Benoit, technician, made a mould of a small section of the Peterborough petroglyph site. After consultation with the Canadian Conservation Institute, and with the assistance of Mr. Luke McCarthy, technician, Archaeological Survey of Canada, National Museum of Man, Ottawa, the mould was made in order to produce a cast of a rock carving for display in our new Great Lakes–Ontario prehistory gallery.

During the past year Miss Georgia Guenther, artist, Exhibit Design Services, also began work on a scale model of an Iroquois longhouse, for display in the gallery. As such preparations progress, we look forward to the construction of the gallery, which we hope will begin during the next fiscal year.

Appointments, Awards, and Honours

We are pleased to announce the appointment of Dr. Mima Kapches as assistant curator in the Department of New World Archaeology. Dr. Kapches received her Ph.D. from the University of Toronto in 1981 and has been a research associate with the department since 1979.

Acquisitions

During the past year we were pleased to receive a native copper knife blade, found on the shore of Lake Huron and kindly donated by Dr. Wilfrid Jarjour of Toronto. The knife dates from the Late Archaic period (1000–3000 B.C.).

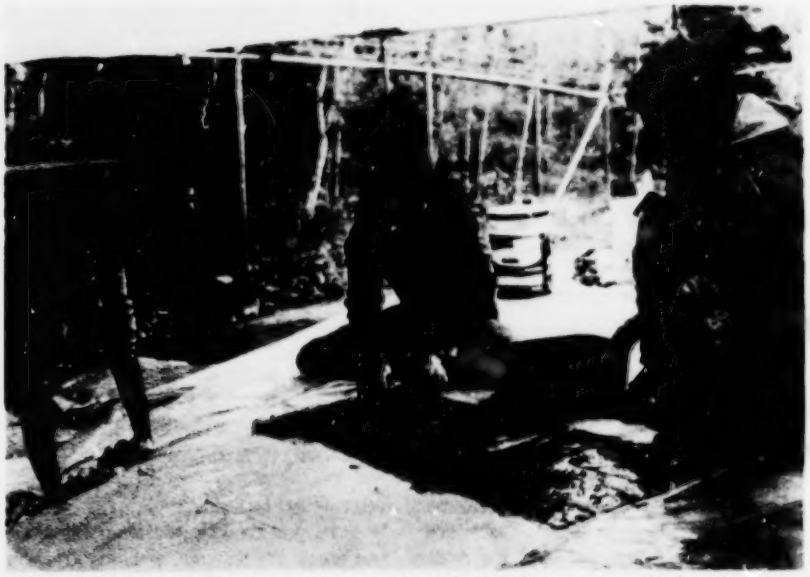
Teaching and Lecturing

Dr. Pendergast was an invited participant in the School of American Research Advanced Seminar on the Lowland Maya Postclassic, held at Santa Fe, New Mexico in fall 1982.

Dr. Storck delivered lectures to the Archaeological Institute of America in Toronto and to the McMaster Anthropological Society in Hamilton. He also presented a paper at the 48th annual meeting of the Society for American Archaeology, held in Pittsburgh, Pennsylvania.

Dr. Kapches delivered lectures on archaeology to five schools in the Toronto area, a group of high school students in Timmins, an adult education class in Toronto, and to Ontario museum studies students at the U. of T. She also spoke at meetings of the Pickering Field Naturalists in Pickering, and the Rotary Club in Toronto. Dr. Kapches presented professional papers at meetings of the Eastern States Archaeological Federation, Norfolk, Virginia; the New York State Archaeological Association, Glens Falls, New York; and the Canadian Archaeological Association, Halifax.

Through the ROM speakers' bureau programme, Mr. Molyneaux lectured on rock art in Bracebridge and Oakville. He also spoke at Trent University, at the Guelph Correctional Centre, and presented a paper to the Canadian Archaeological Association in Halifax.



(Left to right): Dr. Mima Kapches, Miss Lisa Benoit, and Mr. Luke McCarthy prepare a mould of a rock carving at the Peterborough petroglyph site.

Textile Department

Louise W. Mackie

Associate Curator in Charge

After several years of housekeeping and planning for the new galleries, the department was extremely gratified to see textiles once again on display in the ROM. Textile exhibits will open gradually with the associated geographic cluster areas. The costume gallery is scheduled to open in 1984 adjacent to the European galleries, and Chinese costumes will follow soon after. The recent allocation of a Textile Department gallery is a cause for celebration, despite the fact that the space will be temporary. In the meantime, a variety of thematic exhibitions and weaving implements will be displayed. All exhibits will rotate in order to minimize fading and fibre deterioration.

Acquisitions

Acquisitions of note include an 18th-century woman's striped silk jacket, *casaquin*, donated by Mrs. Donald Early (see illustration); two Doukhobor rugs given by Mrs. J.H. Crang and by Mrs. Dorothy K. Burnham; and five Indonesian textiles, donated by the Textile Endowment Fund Committee. A fifth-century Egyptian tunic was also added to our strong Coptic collection. Of a total of 108 acquisitions, 92 were gifts and 16 purchases.

Collections Management

Care and maintenance of the collections are ongoing concerns, overseen by Mrs. Judith Cselenyi, technician, with the assistance of Mrs. Molly Purchase, assistant technician.

Attention has been devoted this year to completing the editing of more than thirty-three thousand catalogue records entered in the computer system (PARIS), a project begun in 1977, which just saw its final year of funding from the National Museums of Canada Museums Assistance Programme. More than seventeen hundred catalogue records were discovered missing and subsequently entered, and almost one hundred and fifty catalogue records of recent acquisitions were entered. Entries were supervised by Mrs. Kris Cruikshank, technician, and assisted by Mrs. Wanda Wrobel, Miss Sue Steers, and Mrs. Wendy Wolak, cataloguers.

The photographic archive of the collection, supervised by Mrs. Cselenyi, was increased by almost one thousand items.

Exhibitions and Loans

The first new exhibit, textiles from the Mediterranean world, dating from the 4th through 20th centuries, opened with the Roman Egypt and Islamic galleries in September 1982. The Islamic display includes a room setting furnished with hangings, cushions, carpets, and costumed mannequins, and a textile shop in the bazaar. A large Mongolian yurt, or round felt tent, acquired for the department in China, was the focus of *Living Textures: Traditional Building Material of the Islamic World*, organized by Miss Louise W. Mackie, associate curator in charge, with Dr. E. Keall of the West Asian Department, as a temporary exhibition in the Mediterrean World gallery.

An 18th-century woman's striped silk jacket, *casaquin*, donated by Mrs. Donald Early.

The department loaned a rare early 18th-century man's morning gown to *Master Dyers to the World* which opened at The Textile Museum, Washington, D.C., and travelled to Chicago's Field Museum of Natural History, and the Asia Society Gallery, New York City. Ten Canadian quilts were loaned to the Battlefield House, Stoney Creek, Ontario, and four needlework samplers with equipment were loaned to the Art Gallery of Northumberland, Cobourg, Ontario. A lady's dress from 1825 that was made and worn in Shelburne was loaned to the Shelburne County Museum, in Nova Scotia.

Field Work and Research

Mr. John E. Vollmer, associate curator, did extensive research on all aspects of trade for the *Silk Roads - China Ships* exhibition and catalogue, and served as resource person on the ROM's tour to China.

Mrs. Mary C. Holford, assistant curator, continued research on 18th-century dress. In addition, she also documented and collected 20th-century couturier gowns, assisted by Mrs. Jane Morrison, volunteer, for a major exhibition and publication in 1986.

Miss Mackie continued research on medieval Islamic textiles and studied collections in the Victoria and Albert Museum, London, and the Cluny Museum, Paris. To facilitate researching the important Abemayor Friedberg collection of medieval Islamic textiles, graduate student Ms Noha Sadek compiled an index of all published textiles with Arabic inscriptions.

Mrs. Katharine B. Brett, curator emeritus, submitted for publication a catalogue raisonné on the ROM's exceptional collection of French 18th-century woodblock-printed cottons. She also reexamined the related collection at the Oberkampf Museum, Jouy-en-Josas, a major 18th-century manufacturing centre.

Mrs. Dorothy Burnham, research associate,

continued research on Naskapi costumes, and was awarded a Canada Council grant for field work on Doukhobor textile techniques and production.

Mrs. Edith Starink, research associate for lace, did extensive and detailed research on 16th- to 19th-century Italian bobbin lace.

Teaching and Lecturing

Mr. Vollmer taught graduate courses on Asian costume at the University of Toronto and at the University of Alberta, Edmonton; gave seminars on textiles at Sheridan College, Toronto; and lectured on Chinese costume for the Canadian Society for Colour and the Michigan Oriental Art Society, Dearborn. He also spoke in the Bishop White lecture series on *Discovering China*.

Among lectures given by Mrs. Holford was "The Fashion Scene in Toronto 1909–1919" for the Costume Society of Ontario.

Miss Mackie spoke on Egyptian textiles and carpets at the Phoenix Art Museum, Arizona, and at a Mamluk seminar organized by the Wadsworth Atheneum and the Hartford Seminary, Connecticut. At a colloquium on "Medieval Pleasures", U. of T., she spoke on medieval Islamic textiles, and for the Toronto Guild of Stitchery on Middle Eastern costume.

Mrs. Starink discussed the highlights of the ROM lace collection at the Centre International de l'Etude des Textiles Anciens Lace Conference in New York, which was also attended by Mrs. Holford and Miss Mackie.

Veronika Gervers Memorial Fund

The ROM is pleased to announce the publication of *The Influence of Ottoman Turkish Textiles and Costume in Eastern Europe* by the late Dr. Veronika Gervers (1939–1979), in the History, Technology, and Art Series, monograph 4. K.G. Pointing (deceased 1983) delivered the annual Veronika Gervers Memorial Lecture, on "Felt and Felt-making in Western Europe".

Other Public Service

Curators continued to identify textiles and costumes for the public and saw about 130 visitors this year. Twenty-four tours were conducted through our handsome work and storage facilities, and the collections were made available for study to visitors from around the world. Mrs. Cselenyi, Mrs. Greta Ferguson, secretary, and Mrs. Cruikshank displayed Canadian handweaving samples at the Fabric Festival, Harbourfront Antique Market, Toronto.

As past president of the Canadian Museums Association, Mr. Vollmer continued to be active, and served as chairman of the nominations committee.

Appointments and Invitations

Miss Mackie was granted tenure by the board of trustees, and was an invited guest for the opening of the Sheikh Nasser al-Sabah Collection of Islamic Art in the National Museum in Kuwait.

West Asian Department

Louis D. Levine

Curator in Charge

The year just ended for the West Asian Department might best be titled "1981–82 Continued", for it appears we spent most of our time completing projects which began that year. This is particularly true for gallery work and special exhibitions, but also characterizes our research and publication activities. The event of the year, however, was our move from the Sigmund Samuel Canadiana Building to new quarters in the curatorial centre. It is good to be back with the rest of the Museum, though we miss our colleagues at 14 Queen's Park Crescent West — which we still think of as the "Main Museum".

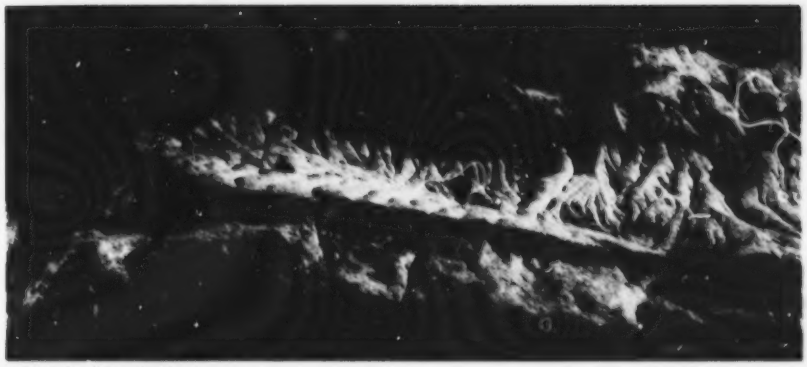
Galleries and Exhibitions

The Chalcolithic, Early States, Levant, Monotheism, and Islamic galleries were all brought to completion and opened to the public in September. Since the autumn further effort has gone into improving those galleries, and plans have been laid for some important changes in response to initial reaction from the public. A major rotation of objects in the Islamic gallery was effected in June 1983. Dr. Edward J. Keall, associate curator, completed his share of the planning for the large special exhibition, *Silk Roads · China Ships*, and Miss Linda Ritchie, artist, completed plaster casts of Parthian stuccoes and a model of the site of Qal'eh-i Yazdigird, important components of that exhibition. Dr. Louis D. Levine, curator in charge, and Dr. T. Cuyler Young, Jr., curator, have been working periodically on some of the archaeological aspects of the Mankind Discovering gallery and Dr. Levine has served on both the gallery development committee and the gallery operations study group. All this experience will, we hope, help us when more detailed planning begins on the prehistory gallery and on the next phase of the department's galleries within the Mediterranean World cluster. We can expect that gallery work, and thinking about and discussing display techniques, will remain a major part of the department's role in the near future.

Field Work and Research

Dr. Keall was in the field with the Zabid Project in the Yemen Arab Republic (North Yemen) in January and February 1983. Otherwise, field work consisted of research at home on materials recovered from earlier projects. Dr. Levine continued his study for publication of the pottery from the site of Jameh Shuran in Iran, excavated in 1978. Dr. Keall supervised ceramic studies by Mr. Krzysztof Ciuk, research assistant, on pottery from excavations at Nippur in Iraq. Dr. Young supervised the studies of Mr. Robert Henrickson, research assistant, on Bronze Age Godin Tepe. Computer-assisted analyses of ceramics from the excavations at Tell

The bazaar, Islamic gallery.



Model of Qal'eh-i Yazdigird, Iran.

Yimneyeh, described in last year's *Annual Report*, are well under way. Dr. Lisa Golombek, curator, completed her book on Timurid architecture, and the 1300-page manuscript has been tentatively accepted for publication by the Princeton University Press.

We also spent a good deal of time on research which did not directly involve the results of field work. Dr. Keall's research on *Silk Roads • China Ships* helped produce the catalogue for that exhibition. Dr. Levine continued his deep involvement with computers and the Akkadian language, which resulted in the refinement of the software needed to begin publication by the Royal Inscriptions of Mesopotamia Project at the University of Toronto. Dr. Young, on sabbatical for six months this year, completed the research that led to manuscripts now in press on the Iron I period in Iran (1450–1000 B.C.), on the history of archaeological work in Iran and chapters for the *Cambridge Ancient History* on the reigns of the first four Achaemenid kings of Persia: Cyrus, Cambyses, Darius, and Xerxes. His investigations into the Neo-Assyrian presence on the Middle Euphrates in the 9th to 8th century B.C. continue as preparation for the publication of the ROM excavations at Tell Yimneyeh.

Collection Management

Our move from the Sigmund Samuel Canadiana Building to our splendid new quarters in the curatorial centre provided us with a unique challenge and opportunity — the chance to reorganize our collections completely from scratch. The task was formidable, but the rewards are great. In one way or another this was again, like the galleries, a project for the whole department, working under the general supervision of our technician, Mr. William Pratt. Now, for the first time in the history of the department, all of the important components of the collection are housed in one place. Our own computer system helps us keep track of things by recording the registration number, old accession number, name of object, material, provenance, date, and location within the building. A major project for the coming year will be the complete checking of these computer records item by item to record the new locations that resulted from the move and reorganization. Although this kind of work is routine, this year the reorganization absorbed an unusual proportion of the department's time and energy. In the long run, of course, having once done it right we will save time and energy in the future.

Teaching and Lecturing

Curators in the department taught one undergraduate and two graduate courses at the U. of T., and supervised the advanced work of five graduate students. Eleven major public lectures were given, mostly by Dr. Golombek on her work on Timurid architecture and by Dr. Young on the ROM excavations in Iraq. Nine papers were read at scholarly gatherings in Canada, the United States, England, France, and The Netherlands. Church and synagogue talks and lectures, as usual, were a prominent departmental activity. Dr. Young spoke seven times on different Toronto radio stations on ROM archaeological fieldwork, and did two five-programme stints on CBC radio's "Morningside" on archaeology and military history. Numerous talks, both formal and informal, were given to a variety of groups on the new galleries. Perhaps the most satisfying result of this activity came when we received high compliments from members of Toronto's Muslim community on the new Islamic gallery.

Other Public Service

Dr. Golombek carried the ROM flag to Kuwait as a guest of the Kuwaiti government on the occasion of the opening of their new National Museum. Members of the department served on twelve different committees and boards at home and abroad. Characteristic of this type of activity was Dr. Levine's service on the ROM computer application steering committee; Dr. Keall's membership on the Museum's *ad hoc* committee on ethics; Dr. Golombek's joining the ROM art and archaeology editorial board; and Dr. Young's service on the archaeological grants board for the National Endowment for the Humanities in Washington, D.C.

Department of Botany

John H. McAndrews

Curator in Charge

The University of Toronto vascular plant herbarium was moved to the Department of Botany in October and November. This extensive collection of 227 700 dried plants is now managed by us and curated by Prof. James Eckenwalder, research associate. The Museum will gain title to the collection when a specialized curator of vascular plant systematics is appointed. Three candidates for this position were interviewed, but again for financial reasons the position was cut before a suitable candidate could be recommended for appointment.

Mr. John Riley, who as curatorial assistant managed the herbarium, resigned to take a post with the provincial government. Ms Deborah Metsger was appointed as the new curatorial assistant and Mrs. Linda White was hired as our new secretary.

Acquisitions

The herbarium accessioned 1988 specimens. Prominent among these were gifts: 573 specimens from Eleanor and Emerson Skelton and 460 specimens from the Metropolitan Toronto Region Conservation Authority. We exchanged about 700 specimens with other herbaria including 108 specimens with the University of Turku, Finland.

The herbarium was reorganized so that genera are now in alphabetical order; higher taxa remain in systematic order.

Dr. J. Krug, research fellow, undertook projects on western Canadian lichens and Ontario bryophytes. This resulted in the addition of 482 collections to the cryptogamic herbarium.

Field Work and Research

In August Dr. John H. McAndrews, curator in charge, and Ms Christine Caroppo, research assistant, collected fossil bones and sediment from a ditch construction site near Sarnia, Ontario. In a

Fossil antlers of elk (*Cervus canadensis canadensis*) from the Sarnia site.

Aerial view of Sarnia fossil bone site.

horizon radiocarbon-dated at 3340 years ago they collected bones of duck, goose, fish, frog, turtle, muskrat, rabbit, wolf, deer, and elk. The elk bones included four nearly complete skeletons; as far as is known this is the largest collection of the extinct eastern subspecies. Fossil pollen and seed studies showed these animal bones were preserved in a marsh that was surrounded by a hardwood forest.

The sediment of Toronto's Grenadier Pond was cored to a depth of 8 m where a woody peat layer was encountered. The peat is estimated to be 7000 years old. Fossil-pollen analyses were also done on Ontario and New York pond sediments in conjunction with geochemical analyses. Sediment cores from several ponds in Newfoundland were collected, dated, and analysed for the study of forest history and sea level change.

A radiocarbon-dated pollen diagram from Gwillimbury Township, Ontario, was constructed for Gordon Dibb of Trent University. It indicates that the Palaeo-Indian hunters of the nearby Deavitt site lived about 10 000 years ago in a boreal forest adjacent to Glacial Lake Algonquin.

The fossil-pollen catalogue was shifted from punch cards to the more efficient computer tape storage by Ms Marili Moore, research assistant. Mr. John Prideaux, research assistant, identified the fossil molluscs in our collection.

Galleries

The botany gallery opened with displays of "Plantscapes of North America" and a satellite image of Ontario. The design for the display "Plantscapes Through Time" and moulds of the giant pollen grain display were completed. Design assistance and display materials were provided for the Mankind Discovering gallery. The travelling exhibition *Cloud Flowers*, a group of paintings of rhododendrons, was presented.

Teaching and Lecturing

Dr. McAndrews taught two courses at the U. of T. He served on four thesis examination committees. Lectures on the fossil pollen in a glacier ice core from Devon Island were given at Dalhousie University and Bedford Institute of Oceanography; a poster on this topic was displayed at the meeting of the American Quaternary Association. Dr. McAndrews also presented a paper entitled "Environmental History of the Superior Basin" at the annual symposium of the Ontario Archaeological Society.

Other Public Service

We continued to cooperate with the poison control unit of the Hospital for Sick Children by making plant identifications; about 125 identifications were made last year. We also identified plant remains from archaeological sites, especially specimens submitted by Parks Canada.

We assisted the Halton Region Conservation Authority in their work at Crawford Lake by making a film of mud coring and also giving a public demonstration.

Dr. McAndrews lectured at the Bruce Country Museum. Ms Metsger conducted a herbarium tour and presented a plant identification laboratory for the Toronto Field Naturalists.

Honours

Prof. G. Norris, research associate, was elected to the Royal Society of Canada.

Department of Entomology

David Barr

Curator in Charge

The highlight of our year was the reopening of the arthropod gallery on level 2 in the life sciences cluster. Our modular case design made it possible to set up the original cases in a new floor plan while still maintaining the forest setting, including the giant red oak and a refurbished forest floor diorama. We have all new exhibits, and the program of insect sounds is now controlled by a microcomputer. The gallery, which serves as an exciting introduction to the hidden lives of earth's six-legged inhabitants, is in the process of progressive installation.

Field Work and Acquisitions

Dr. Glenn B. Wiggins, curator, continued to receive research support from the Natural Sciences and Engineering Research Council of Canada (NSERC) for faunal study of the Yukon Territory and directed the final year of the department's field expedition to the area. The expedition was led by Mr. Rein Jaagumagi, curatorial assistant, who together with Mr. Ed Fuller, research assistant, collected over 15 000 insect specimens from the Yukon and Alaska. Mr. Jaagumagi prepared an extensive report on our northern collections for the past four years. Dr. Wiggins presented an application to the Cultural Property Export Review Board that brought in the superb Crich collection of insect photographs by donation.

Dr. David Barr, curator in charge, led several field trips in Ontario assisted by Mrs. Catherine Baier, graduate student, and Mrs. N.E. Barr, research assistant. They collected approximately three thousand specimens of aquatic mites for behavioural observations and deposit in the research collections. Additional field work by Dr. Wiggins, Dr. Charles R. Parker, research associate, and Mrs. Patricia W. Schefter, graduate student, added collections of caddisflies from Ontario.

Mr. Brian Marshall, technician, assisted by Mr. David Pagnello, technical assistant, and Mr. Christopher Mettrick, student assistant, led numerous local expeditions to provide specimens for our teaching collection and for the arthropod gallery.

Research

Dr. Wiggins continued active systematic research on the caddisflies (Order Trichoptera). The first North American specimens of the tribe Chaetopterygini were described, and an analysis of the Trichoptera of the Beringian refugium (Yukon Territory and Alaska) was presented jointly with Dr. Parker at the joint annual meeting of the

Entomological Societies of America, Canada, and Ontario in Toronto. Dr. Wiggins completed revisions of the genus *Hesperophylax* and of the genus *Psilotreta* with Dr. Parker and worked on a review of the family Molannidae with Mr. Fuller. In addition to other projects, Dr. Wiggins began a study of the phylogeny of caddisfly families in conjunction with Mr. Henry E. Frania, graduate student.

Dr. Barr continued work with Mrs. Baier in perfecting a computer simulation model for the feeding behaviour of aquatic mites, and with Mrs. Barr on identifying mite collections from northern Canada for a distributional study. Mrs. Barr also identified mites collected from Arkansas streams and donated by the U.S. National Park Service. Dr. Barr continued his collaboration with a new ROM research associate, Dr. W.H. Gotwald, Jr., Utica College, Syracuse University on phenetic studies of African army ants of the genus *Dorylus*. A new study of the rare queen ants was begun, and computer programs for the project were written. Dr. Barr also completed a program to convert the pattern of ant wing veins to machine-readable form to facilitate analysis of wing forms.

Dr. Wiggins and Dr. Barr received annual installments of NSERC grants in support of their research on caddisflies and aquatic mites respectively.

Ms Zile Zichmanis, scientific illustrator, prepared detailed microscopic drawings of diagnostic characters of caddisflies for Dr. Wiggins and Dr. Parker. She also drafted a number of charts and graphs for various research projects.

Gallery Development and Exhibitions

Ms Zichmanis continued to provide graphic materials for the arthropod gallery. Dr. Barr, Mr. Marshall, and Mr. Pagnello prepared specimens for display and assisted with exhibit installation. Mr. Marshall and Mr. Pagnello assumed responsibility for the care and feeding of the living exhibits. Mr. Jaagumagi and Mr. Marshall collected the material for a new exhibit of water scorpions and established laboratory cultures to feed them. Mr. Jaagumagi began planning for a temporary exhibition on the butterflies of Metro Toronto.

Loans

Sixty-three loans of specimens of insects and other arthropods were made to scientists and students in various Canadian provinces, the United States, Japan, the U.S.S.R., Jamaica, Scotland, England, Hungary, and Germany. Staff and associates of the department in turn borrowed or were sent fifty lots of specimens from research collections at other institutions.

Teaching and Lecturing

Dr. Wiggins served as supervisor for the research projects of three University of Toronto graduate students. Dr. Barr taught undergraduate courses on the identification of freshwater invertebrates and human ecology for the Department of Zoology, U. of T. and gave a guest lecture in a medical entomology course. Dr. Wiggins spoke on caddisflies to the Toronto Field Naturalists Club and Dr. Barr spoke on aquatic mites to the corresponding group in Richmond Hill. Dr. Wiggins presented invited lectures at McGill University and the U. of T. Dr. Barr coordinated the ROM's continuing education series, *Ontario Field Notebook*, and presented a lecture on local moths and butterflies. Mr. Marshall spoke about insects to a public school class, and Dr. Barr addressed a session of the Toronto Junior Field Naturalists group.

A praying mantis from the internationally acclaimed collection of insect slides donated by Dr. W. Aubrey Crich.

Major Publications

Dr. Wiggins contributed the chapter on Trichoptera to a *Synopsis and Classification of Living Organisms*, a major reference on the world's flora and fauna.

Other Public Service

Ms Susan Pasch, departmental secretary, fielded numerous public enquiries concerning identification and biology of insects and their relatives, answering some requests directly and routing the more unusual questions to the appropriate specialist. Information was made available to members of the public, hospitals, public health organizations, government ministries, and commercial organizations.

The department served as the setting for a scene in the movie *Strange Invaders* during the summer. Dr. Barr and Mrs. Barr wrote interpretive articles for naturalist magazines.

The department assisted in presenting a public programme at the ROM, "Focus on Entomology", that was developed by Dr. Wiggins. Exhibits by the Toronto Entomological Association and a showing of the Entomological Society of America Photo Salon were featured. The event was held in conjunction with the joint annual meeting of the Entomological Societies of America, Canada, and Ontario in Toronto. During the conference, staff organized audiovisual services and welcomed a stream of entomologists to the department.

Dr. Wiggins gave one radio interview, and Dr. Barr gave two newspaper interviews. Dr. Barr also spoke to a science writers' group on science and the media.

Appointments and Awards

Dr. Wiggins was appointed a fellow of the Entomological Society of Canada in recognition of his significant contributions to the field. He was also elected vice-president of the Biological Council of Canada.

Department of Ichthyology and Herpetology

E.J. Crossman

Curator in Charge

Annual reports provide an opportunity to emphasize various unique museum activities. This report pays homage to our volunteers. Museum curatorial departments are chronically understaffed and various tasks go undone for long periods of time. Volunteers make it possible to reduce this work load. They are people with interests in the activities of ROM who make their time and assistance available. Six people volunteered their services this year. The major contributors were Mrs. Lois Johnson, Miss Frances Lidstone, Mrs. Margaret Crossman, and Mr. Charles Blanchard, who provided year-long assistance with literature, collection management, publications, and research respectively. Students Mr. Stephen Davis and Mr. Paul Wronski made their time and talents available for a special photographic project and collection management. Virtually none of this work could have been undertaken by the permanent staff busy with other tasks. This department and its staff would like to express sincere thanks to those who gave their help so freely and willingly.

Miss Kerrie Wainio, Miss Betty Chong, Mrs. Alice Babor, Mr. Stuart McKeen, Mrs. Ernestine Gara, and Mr. Chris Cancade were not volunteers but agreed to assist us under the terms of various government assistant programmes. Our thanks to them as well, for making this a year when a lot of work on tedious but necessary collection management tasks was accomplished. Some of these people assisted in a joint project with the Ontario Ministry of Natural Resources (OMNR). The ROM records of Ontario fishes are being combined with those of OMNR to produce detailed distribution maps. Their help was made possible by a federal-provincial Fisheries Sector Employment Programme grant through OMNR.

Acquisitions

Several thousand specimens were received from forty-eight sources, including individuals, private agencies, government agencies, universities, and museums in Canada, the United States, Ecuador, Bolivia, Jamaica, Barbados, The Solomon Islands, Poland, Australia, Ireland, and China.

Among these were the collection of Fijian marine fishes, weighing about 8000 kg, which resulted from the expedition undertaken by Dr. Richard Winterbottom, associate curator, and Dr. Alan R. Emery, curator; and Atlantic marine fishes collected from on board the United States vessel *Albatross* by Ms Margaret Walters, technician.

The department's regular volunteers. From left to right: Mrs. Lois Johnson, Miss Frances Lidstone, Mrs. Margaret Crossman, and Mr. Charles Blanchard.

Gifts and Loans

Gifts of specimens surplus to ROM needs and derived from past field work were sent to ROM departments, Ontario and Quebec provincial agencies, The Metropolitan Toronto Zoo, and universities and museums in Canada, the United States, Australia, Switzerland, and the U.S.S.R.

Thirty-one organizations around the world received ROM material on loan. Loans were sent to ROM departments, to Black Creek Pioneer Village, and to universities and museums in Canada, the United States, Fiji, Switzerland, France, India, Pakistan, Thailand, and the U.S.S.R. This increasing number of loans includes ROM material sent to specialists for assistance with identification. This need results from the large amounts of material arriving from staff collections in remote areas where the fauna is not well known.

Material from other reference collections was received from twenty institutions in Canada, the United States, France, Australia, South Africa, and England. These constitute return of ROM material sent to specialists for identification and specimens borrowed for gallery display and research.

Collection Management

This year 2300 specimens of amphibians and reptiles and 2028 lots of specimens of fishes were catalogued. In addition, 280 lots of specimens were specially registered, 215 were cleared and stained, and records for 4000 lots of hand-catalogued backlog were transferred to computer input sheets. About 500 coloured slides and 1100 reprints were catalogued and filed.

Fluid levels in the whole collection were checked, tests were made of means of reducing vibration from equipment in our physical plant facilities, and more working surfaces were added for visitors using the collection.

An inventory and reorganization of uncatalogued and catalogued herpetological specimens was completed in anticipation of the beginning of computer cataloguing. The long unavailability of the collection management computer service resulted in many hours being spent typing cards and labels, putting us back technologically to 1974. New input sheets were designed and tested to be ready for the CHIN-PARIS system. The department collection of radiographs was reorganized and consolidated.

A major portion of curatorial assistant Mr. Erling Holm's time was spent identifying specimens from acquisitions, staff expeditions, and field work; and selecting, from large numbers of Ontario fishes made available by OMNR Inventory Branch, those needed for the collection.

Mr. Ross MacCulloch, curatorial assistant, initiated a programme of stimulating exchange of specimens of amphibians and reptiles by writing to herpetologists in many countries. Dr. Winterbottom, by a similar process for fishes started earlier, has, in four years, increased the number of families represented in the collection from 278 to 355.

Field Work

The major expeditions of the year were those of Dr. Winterbottom and Dr. Emery to Fiji; of Ms Walters to the Atlantic Ocean aboard the research vessel U.S.S. *Albatross*; and the expedition to Georgian Bay, Lake Huron, and their tributaries made by Mr. Holm and Ms Walters.

Field work in herpetology increased this year. Mr. MacCulloch carried out several short-term periods of local field work along Lake Erie, in Niagara District, and in Northumberland, Haldimand, Ontario, and Norfolk counties.

Research

The breadth of research activity in 1982–83 was great. Dr. Emery had, in various stages of completion, work on the geographic variation of *Lepidozygus* and *Stegastes*; a checklist of marine fishes of Barbados; work on new species of *Emblemaria* and of *Cirrhilabrus*; and on damselfishes. He is also completing a study with Mr. Arthur Strange of a means of identifying fishes from their scales.

Dr. Winterbottom continues his work on the little-known congrogadid fishes and on Chagos fishes in general, especially the gobioid fishes from that collection. With J. C. Tyler, he also elucidated the phylogeny of the genera of aracanine boxfishes.

Dr. Edwin J. Crossman, curator in charge, was involved in summarization of thirty years' work at Nogies Creek; in preparing for the revision of the book *Freshwater Fishes of Canada*; and in the study of the freshwater fishes of Sarawak, Malaysia. With research associate Dr. J.M. Casselman, he worked on the cleithrum aging project, and an annotated bibliography of the pike, *Esox lucius*.

Mr. Holm carried out studies of diagnostic characters of several Ontario fishes and closely related pairs of species, and studied the moray genus *Anarchias*.

Mr. Stephen Campbell, curatorial assistant, helped with projects on congrogadid, esocoid, gobioid, and pleuronectid fishes and began developing a project on lantern fishes.

Mr. Ross MacCulloch completed writing up the results of a study on *Chrysemys picta* in Saskatchewan, and began preliminaries for a study of emydid turtles in Ontario.

Mrs. Mary Burridge-Smith, research assistant, completed various data analyses for the Hudson Bay and esocid projects and completed the photographic record of the Sarawak fishes and a compilation on use and effect on fishes of electrofishing.

Gallery Development

Work on planning for permanent galleries in ichthyology and in herpetology was initiated and, since there was no firm date or budget for their implementation, discontinued. The interim gallery of World Reptiles was opened in September 1982 and seems to be very popular with visitors. A new sound installation for the animated rattlesnake exhibit was completed.

Two Canadian specialists working in South America and in Africa are voluntarily collecting and posing specimens of amphibians for use in the future herpetology gallery. Dr. Emery and Dr. Winterbottom prepared fish specimens and took colour photographs of fishes for the future ichthyology gallery. Notices were placed in professional journals advising colleagues of the need for rarer specimens with interesting characters or adaptations for use in the galleries.

Exhibitions

The exhibit entitled *Skeletons in our Closet* was transferred from the Museum subway station to the Metro Zoo. Material was provided to Black Creek Pioneer Village for a display there of a naturalist's collection of the 1800s. Work on a travelling exhibit entitled *Adaptations of Amphibians and Reptiles to Northern Environments* is well under way.

Various materials and staff time were contributed to the Discovery gallery, the Mankind Discovering gallery, *Silk Roads - China Ships*, and a travelling school exhibit.

Teaching, Lectures, and Media Appearances

Dr. Winterbottom and Dr. Crossman taught the University of Toronto zoology course, "Ichthyology". Dr. Emery taught courses on coral reef ecology in the Caiman Islands and in a U. of T. biology course; and an ecology course in the U. of T. Faculty of Forestry and Landscape Architecture. The curators also supervised or counselled students at universities of Guelph, Toronto, Ottawa, and Queen's, and chaired or participated in supervisory committees and examinations.

Mr. Blanchard used department facilities to train several secondary-school students in fish identification.

Dr. Emery presented lectures on the diversity of animals at U. of T. and on underwater photography at the Hart House Camera Club. He and Dr. Winterbottom presented a course of twelve lectures on oceanography and marine biology in two Living and Learning in Retirement series.

Dr. Winterbottom spoke at the University of Guelph on the Chagos expedition.

Dr. Crossman gave the following lectures: "Environmental Requirements of Fishes" and "Problems of Identification in Law Enforcement" for OMNR; "Role of Museum Departments in Research and Education" at Trent University; "Identification of Fish Products and Consumer Fraud" for inspectors of the Department of Consumer and Corporate Affairs; "Biology of Muskellunge" for the Ontario Federation of Anglers and Hunters; and "Problems in the Biology of the Muskellunge as They Apply to Angler Harvest" for the World Musky Hunt, Wisconsin.

Mr. Holm spoke to the Willowdale Aquarium Society on native fishes. Mr. MacCulloch presented a paper on Western painted turtles at the ROM Colloquium and a lecture on amphibians in Atikokan, Ontario through the ROM speakers' bureau. Mr. Jim Lovisek, research associate, gave a talk to the Norfolk Field Naturalists on the amphibians and reptiles of Norfolk County with the ROM speakers' bureau.

Appearances on TV were fewer than in previous years, but Dr. Emery was a "mystery guest" on the show "Daytime Challenge". In all, twenty-four newspapers, magazines, radio stations, television stations, and movie production companies were assisted in various ways. These contacts ranged from answering children's questions sent to magazines, to acting as consultant on a coral-reef filming project in the Caiman Islands and from radio interviews about piranhas in Lake Ontario, to problems of moving our collection.

Professional Meetings and Papers Presented

Dr. Emery, Dr. Winterbottom, and Dr. Crossman attended the annual meeting of the American Society of Ichthyologists and Herpetologists (ASIH), Tallahassee, Florida. Dr. Crossman presented an invited paper on "The Hudson Bay and Arctic Archipelago Faunas" in a symposium on the zoogeography of North American freshwater fishes.

Dr. Crossman attended the meetings of the Canadian Committee for Fisheries Research, the Canadian Society of Environmental Biologists, in Winnipeg, and of the Canadian Society of Zoologists, in Ottawa.

Public Service

The department provided various services to a very diverse "public" from private individuals to organized clubs, businesses, and government agencies. The list of these services took twelve close-spaced pages of monthly reports over the year, and a considerable portion of staff time. The variety of this activity includes: participation in steering committees of provincial, federal, and international bodies, clubs, and universities; identification of specimens and judging carried out for various contests, clubs, businesses, agencies, and individuals; consultation about international traffic and commerce in endangered animals (including aiding customs officers with snakeskin banjos and importers with snakes in shipments of machinery); providing information on snakes in basements, fish and frog farming, strange fish in drinking water intakes, the feeding of turtles, hearing in turtles, and local aquatic monsters.

The department continues to coordinate the many calls by OMNR law enforcement personnel for services of the Laboratory of Analytical Systematics in court cases.

In addition, fifty-four individuals or groups of individuals visited the department in order to benefit from one or more of the services from its staff, library, and collections.

Appointments, Awards, and Honours

Dr. Winterbottom continued as assistant professor, Department of Zoology, U. of T.; and as a governor

of the ASIH. He is on the planning committee for the 2nd International Conference on Systematics and Evolution of Indo-Pacific Fishes; and is on the editorial board for Indo-Pacific Fishes of the B.P. Bishop Museum, Hawaii.

Dr. W.B. Scott, research associate, was elected a fellow of the Royal Society of Canada.

Dr. Emery continues as an associate professor, Department of Zoology and Faculty of Forestry and Landscape Architecture, U. of T. and as a governor and editor of the ASIH. He became president of the Royal Canadian Institute in April 1983, after having spent one year as first vice-president.

Dr. Crossman became president of the Canadian Society of Zoologists. He continued as a governor of the ASIH, as professor, Department of Zoology, U. of T. and as adjunct professor, University of Guelph. He was the first recipient of the C.H.D. Clark Award of the Canadian Society of Environmental Biologists.

Mr. Holm received a $250 (US) award from the Smithsonian Institution for a short-term visit to conduct research there.

Publications

The publications conveying the results of various projects in the department are given in the bibliography under individual authors' names.

The curators assisted eleven scientific journals and granting agencies by acting as referees for twenty-five applications or publications. Eighty-eight individuals wrote requesting copies of publications by staff members. These mailings are additional to the regular exchange mailings of staff publications.

Staff Changes

Mr. MacCulloch was appointed as curatorial assistant in herpetology in July 1982. Miss Sandra Kirkpatrick, clerk-typist, transferred to the Registration Department in November. Mrs. Jeanette Ross was appointed clerk-typist in January 1983. Ms Margaret Pike, research assistant, resigned in January to take a position in the Ontario Ministry of the Environment. Ms Cynthia Horkey, department secretary, completed special U. of T. courses on first aid and cardio-pulmonary resuscitation as part of staff development.

Department of Invertebrate Palaeontology

Peter H. von Bitter

Curator in Charge

The department was fortunate this year to lead two field programmes of great significance to Canadian palaeontology. Dr. Peter von Bitter, curator in charge, accompanied by Mr. Raymond Jackson, spent four adventure-filled weeks on mountainous northern Ellesmere Island in the Canadian Arctic surveying and sampling for conodonts. Conodonts are microscopic toothlike fossils used for telling the age of rocks. Logistical support was provided by the Polar Continental Shelf Project and the Geological Survey of Canada.

Dr. Desmond Collins, curator, headed a six-man team exploring and extending the known extent of the Burgess Shale fauna in Yoho National Park, British Columbia. During the six weeks, the ROM party located seven new possible sites of the scientifically unique soft-bodied fossils.

We were pleased to reopen the invertebrate fossils gallery in the spring of 1983.

Acquisitions

Many fine fossil specimens were acquired, including a collection of insects and plants, embedded in remarkably clear amber, from the Dominican Republic; a suite of trilobites and crinoids from New York and Ontario; and approximately one hundred and twenty crinoids and cystoids from Indiana.

Two Cambrian nautiloids donated by Mr. Chen jun-yuan, visiting research fellow, will be displayed in the gallery. A figured specimen of a Devonian crinoid, *Costalocrinus sentosus* from Erie County, New York was donated by Mr. George McIntosh of the Rochester Museum; and a large slab of proetid trilobites from Toronto was given to us by Mr. R. Brewster. We also received fossil specimens from Dr. M. Tatematsu of Japan, and from Dr. C.S. Churcher of Toronto.

Field Work

In addition to the Burgess Shale expedition, Dr. Collins with Mr. Chen jun-yuan spent two weeks in western Newfoundland collecting nautiloids for their research on early cephalopods.

In conjunction with the North American Palaeontological Convention III (NAPC III) in Montreal, Dr. Collins and Mrs. Janet Waddington, curatorial assistant, participated in a two-day field trip to the Quebec City area to view the Ordovician stratigraphy and palaeontology of the St. Lawrence Lowlands and frontal Appalachians.

Apart from the field work on Ellesmere Island, Dr. von Bitter's field activities were confined to the more pastoral parts of southern Ontario. He and Mrs. Betty Eley, research assistant, examined many chert-bearing horizons as part of their work for the Ontario archaeological community. The project's aim is to document the distribution and characteristics of this material, which was used by Ontario's prehistoric peoples for making their tools. This project is generously supported by the Ontario Heritage Branch of the Ministry of Citizenship and Culture.

Research

Dr. von Bitter continued his research on the taxonomic, evolutionary, and palaeoecological significance of conodonts. The major study, with Dr.

The ROM in the Arctic. Dr. Peter von Bitter, curator in charge, is seen in the mountains of Ellesmere Island.

G.K. Merrill, research associate, on the conodont genus *Ellisonia* was published this year. With Dr. R. Gait, Department of Mineralogy and Geology, Dr. von Bitter carried on the mineralogical investigations on the precursors of certain Canadian calcite pseudomorphs.

Dr. Collins's report on the fauna and stratigraphy of the Mt. Stephen Formation, which includes the Burgess Shale, has been accepted for publication by *Science*.

Mr. Chen jun-yuan from the Nanjing Institute of Geology and Palaeontology, the People's Republic of China, and Dr. Collins are comparing the cephalopod taxonomy and stratigraphy of the Lower Ordovician rocks of western Newfoundland and north China.

Mrs. Waddington, with Dr. R. Ludvigsen of the University of Toronto, is preparing a volume on Ontario brachiopods, in the *Fossils of Ontario* series. Mr. David Rudkin, technician, continued his study of trilobite abnormalities and the trilobite faunas of the Mt. Stephen Formation of British Columbia. Dr. Madeleine Fritz, research associate, continued her restudy of the bryozoan fauna from Workman's Creek and Manitoulin Island, Ontario.

Gallery Development and Exhibits

The department, led by Dr. Collins, reopened the temporary invertebrate palaeontology gallery containing new, updated information, new displays, and aquaria. We are now planning for the permanent gallery.

A number of temporary exhibits were produced by the department under the direction of Mrs. Waddington. A display of the spectacular trilobite *Paradoxides* from Manuels, Newfoundland was exhibited at the NAPC in Montreal, the Scarborough Gem and Mineral Show, and the Niagara Peninsula Geological Society Show. A display on the Burgess Shale was also exhibited at NAPC III. A display of unique fossils from Solnhofen, West Germany was shown at the Central Canadian Federation of Mineralogical Societies (CCFMS) Annual Gem and Mineral Show in Waterloo.

Loans

Fossil specimens were shipped to many American and Canadian destinations, and to Sweden and Great Britain. We welcomed palaeontologists from Sweden, Australia, Poland, Great Britain, West Germany, Japan, Canada, and the United States who came to study and photograph our fossil collections.

Teaching and Lecturing

Dr. von Bitter taught three geology/palaeontology courses and supervised two M.Sc. candidates at the U. of T. He also lectured to the Walker Mineralogical Club and the Barrie Gem and Mineral Club. Mr. Rudkin discussed the preparation and conservation of fossils at the CCFMS educational workshop, and served as judge of fossil exhibits at the CCFMS annual show. The Burgess Shale fauna was the topic for lectures by Dr. Collins to the Scarborough Gem and Mineral Club, Yoho National Park Naturalists, and the Institute of Sedimentary and Petroleum Geology in Calgary.

Dr. von Bitter addressed the Symposium on Conodont Paleoecology at the Geological Association of America meeting in Wisconsin, the NAPC III in Montreal, and was coauthor of papers presented at the annual meeting of the Geological Association of Canada in Victoria. Dr. Collins also presented a paper at the Victoria meeting.

Public Service

Staff members answered numerous questions, in person and by mail and telephone, on fossils, and on how to clean and preserve them. More than two hundred specimens, mostly from Ontario, were identified.

Mrs. Waddington was interviewed for the CJRT "Science Journal" on Ontario fossils and their history. Dr. Collins worked with the CBC's programme "The Nature of Things" for a show on the Chambered Nautilus and a forthcoming show on the Burgess Shale expedition. Dr. Fritz was interviewed on CBC's "Morningside" and by *The Globe and Mail* on her life and work as one of Canada's first female palaeontologists.

Dr. Collins was the ROM's representative at the Natural Heritage Protection Conference held in Toronto.

Dr. von Bitter, Mrs. Waddington, Miss Joan Burke, secretary, and Mrs. Cynthia Millar-Campbell, technician, participated in the second annual 24-hour relay "Run for the ROM".

Awards, Honours, and Appointments

To support his research on Carboniferous and Permian conodont biostratigraphy and palaeoecology in Arctic Canada, Dr. von Bitter received an award from NSERC in the amount of $16 690 for each of two years.

Dr. Collins received an NSERC grant of $8000 and an Energy, Mines, and Resources grant of $4000 for the Burgess Shale project.

Department of Invertebrate Zoology

Dale Calder

Associate Curator in Charge

With collections relocated and reorganized in new quarters and a small interim gallery of invertebrates open to the public, much of the effort within the Department of Invertebrate Zoology this year was directed toward establishing a vigorous research programme. Mrs. Renate Carson, curatorial assistant, undertook a study of the Bryozoa of Northumberland Strait for presentation at a conference of the International Bryozoology Association to be held in Vienna during July 1983. Dr. Dale Calder, associate curator in charge, began work on a systematic monograph of the hydroids from the oceanic island of Bermuda based on the Museum's holdings of Bermudian hydroids. This collection, the most extensive and varied in existence anywhere, includes several undescribed species. Research associates Dr. Anita Brinckmann-Voss and Dr. Janis Speel conducted investigations on the systematics and life history of hydrozoans and echinoderms, respectively.

Collections and Acquisitions

Cataloguing efforts concentrated on collections of fresh water crustaceans obtained over the years from a variety of sources, and on a large collection of marine invertebrates brought to the ROM from the South Carolina Marine Resources Center during 1981 and 1982. Much uncatalogued material remains, but the cataloguing efforts of Ms Janet Webb, a summer aide employed during 1982 and 1983, have been particularly noteworthy. At the same time, Ms Katherine McGrath, departmental secretary, has undertaken the painstaking task of transcribing data from catalogue books to filing cards.

A valuable collection of shells, including specimens from all parts of the world, was conveyed to the Museum by the London (Ontario) Historical Museums this year. Other new additions include materials from Bermuda and Belize acquired during field studies and vacations by the staff of the department, mixed invertebrates from the Indo-west Pacific donated by the Department of Ichthyology and Herpetology, and miscellaneous smaller donations from various sources acknowledged elsewhere.

Field Work and Research

Dr. Calder spent five weeks during the year at the Bermuda Biological Station studying hydroids and collecting miscellaneous invertebrates for the Museum. His monograph on Bermudian hydroids, nearly one-third completed, will provide a

Dr. Dale Calder, with invertebrate specimens, on the dock at the Bermuda Biological Station.

thorough systematic treatment of each of the families, genera, and species of hydroids known to occur on this subtropical seamount. A taxonomic paper by Dr. Calder on the families Sertulariidae and Plumulariidae from estuaries of South Carolina was published this year, and a manuscript on the nematocysts or stinging capsules of the jellyfish *Stomolophus* was accepted for publication in *The Canadian Journal of Zoology*. A paper on marine benthos, written in collaboration with his former colleagues Mr. D.M. Knott and Dr. R.F. Van Dolah of the South Carolina Marine Resources Research Institute, is currently in press. Another manuscript on benthic invertebrates by the same authors has been accepted for publication.

During the year, Mrs. Carson completed her research on the bryozoan fauna of Northumberland Strait and began work on bryozoans in a recently acquired collection of invertebrates from the southeastern United States.

Dr. Brinckmann-Voss completed a manuscript on a collection of hydroids from British Columbia. She also undertook field and laboratory studies on new species of the hydrozoan genus *Sarsia* from the West Coast.

A major publication on the comatulid crinoids of the Southern Ocean by Dr. Speel and her collaborator, Dr. John Dearborn of the University of Maine, appeared in the scientific literature during the year.

Gallery Development

A totally new gallery of invertebrates was opened to the public with the reopening of the ROM in September 1982. This small, interim gallery stresses invertebrate diversity, and as many actual specimens were placed on display as could reasonably be arranged in the limited amount of space available. Insofar as possible, dried, lifelike, naturally coloured specimens were used in the gallery. Soft-bodied invertebrates were mounted in small but aesthetically pleasing blocks of clear plastic, eliminating the need for fluid-filled bottles. Use of "hands-on" displays and models is being tested in this temporary gallery.

Professional and Public Service

More than one hundred requests for staff scientific publications were received, and eight manuscripts sent to us for review were refereed. The public contacted the department for advice on a variety of topics, ranging from providing reference materials on, and photographs of, invertebrate animals, to outlining methods of invertebrate aquaculture, to summarizing procedures for cleaning and mounting specimens. Departmental collections were utilized for both scientific and artistic purposes. Identification services varied from the examination of invertebrate parasites in imported seafood products, at the request of government inspectors, to the naming of shells in private collections. Hydroids sent to the ROM for identification included specimens from eastern and northern Canada, the southeastern United States, the Gulf of Mexico, Spitzbergen, and New Guinea.

Dr. Calder gave several public presentations during the year, including seminars at the U. of T. and the Bermuda Biological Station.

Visitors were welcomed from universities, medical schools, private industry, governmental agencies, and other museums in Canada and the United States to discuss research or examine specimens.

Appointments and Awards

Dr. Calder was appointed associate professor in the Department of Zoology at the U. of T., and served as a member of the invertebrate zoology task force assembled by the Canadian Heritage Inventory Network (CHIN) in Ottawa to study the automation of collection data on invertebrates under the PARIS system. He received a fellowship from the Canadian Associates of the Bermuda Biological Station for field work in Bermuda during the year.

Department of Mammalogy

Randolph L. Peterson

Curator in Charge

Reorganization has been an important part of the department's activities this past year as the staff continued to settle the collection in its new home. However, the research and field programmes of the department continued, with collecting concentrating on Ontario and field trips to such diverse areas of the world as Finland and Colombia. Ontario field work, which was a joint project of the Museum and the Ontario Ministry of Natural Resources (OMNR), was centred in the Hudson Bay Lowland. This field study attests to the fortitude of the staff — during the four weeks they were in northern Ontario, it rained every day except one!

Acquisitions and Collections

In 1982–83 the department acquired 695 specimens. Notable among these was the donation of twenty-five manatee skeletons salvaged from dead animals by the U.S. Fish and Wildlife Service in Gainesville, Florida. Other acquisitions included a large series of specimens from the Harricanaw River, Ontario collected by staff; a number of small mammals from Belize collected by Mr. Joe Fragoso and Mr. James Kamstra; several pieces of baleen from Fin (*Balaeonoptera physalus*) and Sei (*B. borealis*) whales from the University of Guelph; forty raccoon dogs (*Nyctereutes procyonoides*) from Mrs. Salme Hatmaa, and a series of small rodents from the Dakhleh Oasis, Egypt collected by Dr. C.S. Churcher. The OMNR donated another large series of marten (*Martes americana*) and fisher (*M. pennanti*) specimens from the Parry Sound District; our collection of these mammals is the largest in the world. Twenty-five Rocky Mountain Bighorn sheep (*Ovis canadensis*) skulls and leg bones were purchased from the British Columbia Provincial Museum. Collections were also enlarged by the addition of specimens from Algonquin Park and the Rouge River Valley, Ontario, and from Colombia and Kenya. Several specimens of the opossum (*Didelphis virginianus*), which is increasing its range in southwestern Ontario, were added to the collection.

Field Work

Field work coordinated by Mr. Jeff Gibson, technician, was continued in the Hudson Bay Lowland of Ontario. This study was curtailed after three years because of lack of funding. With Mr. Steve Nash and Dr. Ross James of the Department of Ornithology and Mr. Mark Peck, a study camp was set up on the Harricanaw River about 68 km SE of Moosonee. The OMNR provided flights to and from the study area and a motor and a radio. Several species of rare small mammals were

collected, including the arctic shrew (*Sorex arcticus*), the northern bog lemming (*Synaptomys borealis*), and the woodland jumping mouse (*Napaeozapus insignis*). Funding for the project was provided by the Canadian National Sportsmen's Fund.

Dr. J.R. Tamsitt, curator, conducted field work in west central Colombia during August, accompanied by students from the National University of Colombia.

Dr. M.B. Fenton, research associate, spent several weeks during the summer collecting bats at Kootenay, Glacier, and Mount Revelstoke national parks in British Columbia.

Research

Dr. Randolph L. Peterson, curator, initiated a revision of the genus *Pipistrellus* as a part of his continuing work on the bats of Malagasy. His monograph on this subject has been slowed by the discovery of a large number of previously unstudied specimens in the collections of the Belgian and Netherland museums. Dr. Peterson also described a new bat of the genus *Glauconycteris* from the east coast of Kenya. His research was funded by NSERC.

Dr. Tamsitt continued his research on neotropical bats, studying specimens at several institutions in Colombia during July and August. With Mr. Christoph Häuser, he initiated a study of variation in de la Torre's yellow-shouldered bat and with Mr. Steven Perrigo, he completed a study of a well-preserved fossil moustache bat.

Ms Judith Eger, curatorial fellow, is studying four species of arctic mammals for her Ph.D. degree.

Dr. Fenton continued his research on the echolocation of bats and had a book on these mammals published entitled *Just Bats*.

During the Christmas season, Dr. Tamsitt returned to Colombia to continue his field work and to interview students planning graduate studies at North American universities under the auspices of the Colombian Fulbright Commission.

Teaching and Lecturing

Dr. Peterson and Dr. Tamsitt taught the fourth-year course in mammalogy and supervised graduate students at the University of Toronto. Dr. Tamsitt was appointed to two M.Sc. committees at the National University of Colombia. In Colombia, Dr. Tamsitt served as a visiting professor at the National University, the Pontifical Javeriana University, and the Industrial University of Santander, and taught three graduate courses conducted in Spanish. Ms Eger spoke on Ontario mammals to the Pickering Naturalists Club. Dr. Fenton gave a seminar on echolocation by bats at the Department of Zoology at the U. of T.

Loans

The staff filled requests for twenty loans from various institutions in Europe, the United States, and Japan, as well as from colleagues in the Museum and at the U. of T. Specimens and slides were also lent for illustrative and educational purposes.

A member of the Department of Mammalogy staff setting a trapline along a stream at the Harricanaw River.

Gallery Development

The mammal section of the life sciences gallery opened unofficially in January 1983. This part of the gallery is devoted to mammals of the Old World and contains such diverse specimens as the aye-aye, a rare primate from Malagasy; the tree pangolin, a small scaly mammal from West Africa; and the takin, an uncommon bovid from Asia. Other exhibits in this gallery are the dioramas of the Budongo Forest, Nairobi National Park, and an Indian tea plantation. Planning is in progress for the next stage of the mammal gallery, which will be devoted to mammals of the New World.

Meetings Attended and Papers Presented

Dr. Peterson presented two papers at the Third International Theriological Congress in Helsinki, Finland. At the 13th North American Symposium on Bat Research held in Louisville, Kentucky, he spoke on systematic variation in molossid bats. In May he represented the ROM at the annual meeting of the Association of Systematics Collections (ASC), and in June he attended the annual meeting of the American Society of Mammalogists (ASM) in Gainesville, Florida, where he presented a paper on Old World *Pipistrellus*.

Dr. Tamsitt attended several meetings during his stay in Colombia, among which were the International Symposium on Parasitology and the First National Congress on Ecology, both in Bogota. He was a panel member for a discussion on scientific research in North American universities

Loading plane at Moosonee for transport to study site on Harricanaw River.

during the orientation programme for Colombian Fulbright grantees and gave two invited lectures at universities in Bogota, as well as two talks of a more popular nature in Bogota and Bucaramanga.

Appointments, Awards, and Honours
Dr. Peterson was appointed to the steering committee of the Fourth International Theriological Congress, section of mammalogy. He continued to serve on the board of directors of the ASM and as ROM representative with the ASC. Dr. Tamsitt was awarded a Senior Fulbright-Hays Fellowship and was on sabbatical for three months in Colombia. Ms Eger was appointed to the board of directors of the Elsa Wild Animal Appeal of Canada and continued as a member of the information retrieval committee of the ASM. Dr. Dario Valdivieso, research associate, was elected a member of the Canadian College of Microbiologists.

Public Service
The department continued to provide identification services to the public as well as to other institutions, and to the RCMP and Canada Customs, so that trade in endangered species may be better controlled. For example, a large collection of ivory objects seized by the RCMP was identified. Tours of the collection area were provided and many telephone and mail enquiries were answered by staff members.

Staff and Visitors
Mr. David Nagorsen, curatorial assistant, left in July 1982 to take up a position as curator of mammals at the British Columbia Provincial Museum and was replaced by Mr. Richard N. Bramwell. In September, Ms Susan Woodward joined the department as research assistant replacing Miss Janet Cooper. Dr. Hung Sun Koh, a former graduate student of Dr. Peterson and now a professor at Chungbuk University in Korea, returned to the department as post-doctoral fellow. Able assistance was given in the lab during the summer by Miss Vicki Sahanatien and volunteer work was done in the department during the winter by Miss Sheila Beaudette.

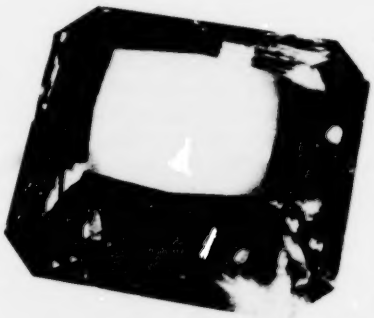
Mr. Robert Glen, a field associate of Dr. Peterson, visited the department to develop plans for an expedition to Ethiopia. Mrs. Noreen Curry, research associate, visited the department during the year and has offered to sponsor a special bat exhibit in connection with our gallery plans.

Department of Mineralogy and Geology

S.B. Lumbers

Curator in Charge

The highlight of the year's activities was the choosing of a designer for the new earth sciences gallery. The successful candidate, Mr. J.J. André of Victoria, British Columbia will work with Mr. K. Verburg of Marshall Macklin Monaghan Ltd., of Toronto on the initial stage of the design. In spite of the time involved in the selection of a designer, departmental curators managed to conduct a wide range of other activities during the year, including field work, research, teaching, lecturing, preparing special exhibits, acquiring new material for the collections, and visiting research institutions and museums in Canada and abroad.



Colourless 405-carat topaz from Brazil, cut and presented by Ralph and Rudi Wobito.

Acquisitions and Collections
About five hundred specimens were added to the petrology collection. Dr. J.J. Brummer of Canadian Occidental Petroleum Ltd. donated specimens from the important gold discovery near Hemlo, Ontario. Dr. R.P. Sage of the Ontario Geological Survey (OGS) donated thirty display specimens, field notes, and research material covering his extensive work on Ontario's alkalic rock-carbonatite intrusive bodies. Dr. S.B. Lumbers, curator in charge, collected specimens of phosphate ore and granite from Egypt. An important part of the petrology collection consists of specimens, zircon concentrates, and heavy mineral separates of rocks isotopically dated in the Jack Satterly Geochronology Laboratory. Over 300 rocks have now been dated, and this reference collection, a unique product of our isotopic and dating programme, is becoming increasingly useful to researchers in other laboratories engaged in isotopic and geochemical studies.

Mineral and Gem Collection
The more than 1400 specimens catalogued during the year included specimens from the Frohberg Collection, mainly through the efforts of Mrs. Mary Grzedzielski, volunteer, and most of the A.A. Cole Collection of specimens from the Cobalt and Gowganda areas, catalogued by Dr. Jack Satterly, research associate. Dr. Satterly has also catalogued a 600-specimen collection of gold ore, most of which was collected by Mr. Frank Ebbutt of Toronto. More of the G. Grant Waite gem collection has also been catalogued.

About fifty gemstones have been acquired by purchase and donation. A major donation is a beautifully cut 405-carat colourless topaz from Brazil, cut and donated by Messrs Ralph and Rudi Wobito of Unionville.

As a result of associate curator Mr. Darko Sturman's efforts, exchanges made with institutions around the world have resulted in the acquisition of many species not previously represented in the ROM collections.

A major part of the collection is being reorganized by Dr. J.A. Mandarino, curator, to conform to a newly published classification of the non-silicate minerals.

Dr. Graham Wilson, a volunteer from the University of Toronto, continued to study and reclassify the chondrites in the meteorite collection.

The mineralogical and petrological collections grow each year through the generosity of donors who provide not only specimens, but also funds. We would like to thank them all for their support and interest.

Research and Field Work
The unique analytical capabilities in the Jack Satterly Geochronology Laboratory, which allow isotopic ages to be measured with unprecedented accuracy, continue to find new applications in collaborative studies with government surveys, universities, and the mining industry. Dr. T.E. Krogh, curator; Dr. F. Corfu, research associate and geochronologist for the OGS; Dr. D.W. Davis, research fellow; one visiting scientist; and six graduate students, made 740 isotopic analyses while carrying out numerous geochronological studies. In addition, Mrs. Cui Chengyu, from the People's Republic of China, has been studying U-Pb isotopic dating techniques. Field work was conducted in the Red Lake, Batchawana, Kenora, Sudbury, Wawa, and Matheson areas of Ontario and in northwestern Quebec, Newfoundland, and Nova Scotia. A new mass spectrometer, for which Dr. Krogh received a $263 000 grant last year, is now being installed and tested.

Dr. Lumbers and Mr. V. Vertolli, curatorial assistant, continued their research on the geological history of the Grenville Province of Ontario. In collaboration with Mr. Tsai-Way Wu of the University of Western Ontario and with the OGS, a detailed geochemical study of the Algonquin batholith, which forms the central part of the Grenville

Province, was undertaken. Dr. Lumbers and Mr. Vertolli also visited Kidd Creek Mines in Timmins, Ontario to examine the mine stratigraphy with mine geologists. From 30 October to 18 November 1982, Dr. Lumbers visited Egypt and Israel, and was Canada's representative at the sixth meeting of the Subcommission on Precambrian Stratigraphy of the International Union of Geological Sciences held at Tanta, Egypt. Dr. Lumbers also did field work in the Eastern Desert of Egypt, and visited museums in Egypt and Israel and the facilities of the Geological Survey of Israel.

Dr. R.I. Gait, curator, is conducting research to determine the precursor minerals of various calcite pseudomorphs that have world-wide distributions. He is also conducting an inventory of the gem collection assisted by Mrs. Josephine Galt (part-time) and Mrs. Maurine Charlton (volunteer), both qualified gemmologists. Dr. Gait made a collecting trip to Mont St-Hilaire, Quebec, and in February, he visited some famous mineral localities in Chihuahua and Durango states, Mexico.

Dr. Mandarino continued his work on the assessment of mineralogical data, with the help of research assistants Mr. Robert Falls and Mr. Lee Groat. Much of this information will be incorporated in a book on the mineralogy of Mont St-Hilaire, Quebec. Work is continuing on the establishment of a major mineralogical data base. Research was completed on two studies of weddellite from Ontario and Oregon, and a study on an occurrence of triplite in Nova Scotia, and papers reporting the results of all three studies are in press. To facilitate much of his work, Dr. Mandarino wrote several programs for the Apple II plus computer. Field work was conducted by Dr. Mandarino, Mr. Wan Pu, Mr. Falls, and Mr. Groat in the Parry Sound and Minden areas of Ontario.

Mr. Sturman continued his research on new minerals and methods in optical mineralogy. Papers reporting the results of two mineralogical studies were completed and accepted for publication.

Dr. F.J. Wicks, curator, with the assistance of Mr. Wan Pu and Mrs. Judit Ozoray, mineralogical assistant, continued to work on the mineralogy and geochemistry of the chrysotile asbestos deposits of Ontario and of the Eastern Townships of Quebec. In an associated project, Dr. Wicks and Mrs. Eva S. Schandl, mineralogical assistant, have made a comparative study of the rodingites found in both areas. This is the first time that rodingites from Precambrian terrains older than 2600 million years have been studied in detail. Miss Terri Ottaway, technician, under the direction of Dr. Wicks, has carried out fluid inclusion, mineralogical, and petrological studies of the emerald deposits of Muzo and Chivor in Colombia. The thermoanalyzer-quadrupole mass spectrometer was used to analyse nearly sixty specimens of serpentine and other minerals. Dr. Wicks and Mr. Wan Pu carried out field work on asbestos deposits in the Timmins area of Ontario.

View of 66-m-long, unfinished granite obelisk in a quarry at Aswan, Egypt.

Exhibitions and Gallery Development

Under the leadership of Dr. Gait, the department arranged several displays for exhibitions at amateur mineralogical meetings in Canada and the United States. The department is contributing material for display to the Mankind Discovering gallery, and Dr. Gait and Dr. Lumbers have developed displays for the Discovery gallery. Dr. Lumbers is working with Extension Services to develop a travelling school case on an introduction to rocks.

Early in the coming fiscal year, following finalization of a contract, the design team of Mr. J.J. André and Mr. K. Verburg will commence work with departmental curators to develop a concept and a detailed scale model of the earth sciences gallery for fund-raising and construction purposes. Mr. André has designed several spectacular and exciting galleries in both Canada and the United States and we very much look forward to working with him.

Loans

Loans for research studies were made to Wayne State University, Michigan; University of Western Ontario; OGS; and Monopros Limited, Toronto. Mineral specimens were loaned or given to numerous qualified individuals and institutions for study and research in Canada, the United States, and overseas. Many requests for colour slides and transparencies were fulfilled. Heavy mineral separates from the geochronology laboratory were loaned to Atomic Energy of Canada for testing in their nuclear waste disposal programme.

Teaching and Lecturing

Dr. Krogh, Dr. Mandarino, and Dr. W. M. Tovell, honorary curator, taught courses in conjunction with the Department of Geology, U. of T. Dr. Krogh, Dr. Lumbers, and Dr. Wicks served on thesis committees at the U. of T. Dr. Mandarino supervised two undergraduate theses, one at the U. of T. and the other at the University of Waterloo, and served on a Ph.D. committee at the University of Delaware.

Dr. Lumbers gave an invited lecture on the geochronology of the Precambrian Shield in Ontario at the sixth meeting of the Subcommission on Precambrian Stratigraphy of the International Union of Geological Sciences, held in Egypt. He also gave an invited lecture on the geology of the Grenville Province of Ontario at the second annual workshop of the Canadian Tectonics Group, at Gravenhurst, Ontario, and attended the Prospectors and Developers Association meeting in Toronto.

Dr. Krogh gave an invited lecture on the U-Pb isotopic dating of zircons at the State University of New York at Albany and, at the Northeastern sectional meetings of the Geological Society of America, a paper on the precise U-Pb isotopic ages of zircons from the Avalon Peninsula, Newfoundland.

Dr. Gait attended gem and mineral shows in Detroit, Tucson, and Scarborough and the Rochester Mineralogical Symposium. He gave three invited lectures to mineral club meetings in Canada and the United States. Dr. Tovell gave an invited lecture to the Academy of Medicine and the Walker Club in Toronto, and conducted field excursions to Iceland

and to Thunder Bay, Ontario, for the Members' Volunteer Committee. Dr. Mandarino gave six invited lectures to mineralogical club meetings in Canada and the United States, including the third C. Wroe Wolfe Lecture at the Boston Mineralogical Club, Cambridge, Massachusetts.

Mr. Sturman and Dr. Gait gave invited lectures at a symposium sponsored by the Mineralogical Society of America and Friends of Mineralogy at Tucson, Arizona. Dr. Wicks gave invited lectures in two courses given by Prof. J.C. Rucklidge, at the U. of T. Dr. Wicks, Dr. Krogh, Dr. Lumbers, and Mr. Vertolli attended the Geoscience Research Seminar of the OGS, Toronto, at which Dr. Wicks presented a poster display on research on the chrysotile asbestos deposits of Ontario.

Dr. Mandarino was one of five Canadians to attend the meeting of the International Mineralogical Association (IMA) in Varna, Bulgaria. He presented a paper on selenites, tellurites, selenates, and tellurates. Dr. Wicks attended the annual meeting of the Geological Society of America in New Orleans, where he participated in the Mineralogical Society of America's short course on metamorphism. Dr. Krogh, Dr. Mandarino, and Dr. Wicks attended the Geological Association of Canada (GAC) and Mineralogical Association of Canada (MAC) meetings in Victoria, British Columbia, where Dr. Mandarino gave a paper on weddellite, and Dr. Wicks gave a paper on deformation of ultramafic rock.

Publications

Seven scientific and interpretive papers by curators, post-doctoral fellows, and research associates of the department were published during the year (see staff bibliography). A major paper by Dr. Lumbers on the metallogeny of Renfrew County, Ontario, summarizes five years of geological work in the central part of Grenville Province and, together with the accompanying maps, gives an updated geological framework for a 9300 km^2 area.

Professional and Public Service

The department dealt with many enquiries from the public concerning identification of minerals, gems, rocks, and general geology and carried out identifications of rocks and minerals for other ROM departments and for geologists from government and industry. Several thin-sections of rocks were prepared for geologists from universities and industry and for the Department of Invertebrate Palaeontology.

Staff members conducted various professional groups from government and universities through the research facilities. Staff members also gave interviews to the press, refereed scientific and other manuscripts, reviewed grant requests by other scientists, and sat as members on international and national committees and associations. Dr. Mandarino served as interim treasurer of the IMA; in March 1983 he was appointed subscription manager of the MAC, following Dr. Gait in this post; he completed his term of office as president of the Walker Mineralogical Club; and he continued to serve as the Canadian representative on the Commission on Gem Materials of the IMA. Dr. Lumbers continued to serve as a corresponding member on the Subcommission on Precambrian Stratigraphy of the International Union of Geological Sciences.

The department received visits from Mr. W.T. Foster, Deputy Minister of the Ontario Ministry of Natural Resources, and numerous scientists from Canada, the United States, England, Norway, Australia, Germany, Israel, and South Africa.

Appointments, Awards, Honours

NSERC grants were awarded to four staff members: Dr. Davis was awarded $10 000, representing the second instalment of a five-year grant; Dr. Krogh received $22 600, representing the second instalment of a two-year grant. Dr. Mandarino received $9000 representing the second instalment of a two-year grant; and Dr. Wicks received $13 750, representing a new grant for crystal-chemical studies of the serpentine minerals. Dr. Mandarino received a New Technology Employment Grant. Dr. Wicks also received renewals of two additional grants, one an Ontario Geoscience Research grant for $26 140, and a second, an Energy, Mines and Resources Canada grant for $7 500.

Dr. Gait was reelected treasurer of the Mineral Museums Advisory Council and was appointed an executive editor for *Rocks and Minerals*, a magazine published in Washington, D.C. for mineral collectors. Dr. Mandarino was elected chairman of the Commission on New Minerals and Mineral Names, IMA. He is the third person to hold this post, having been preceded by Dr. Akira Kato of Japan and Dr. Michael Fleischer of the United States. Dr. Tovell was reappointed to the Metropolitan Toronto and Region Conservation Authority for one year. Dr. Wicks and Mr. Sturman were each granted a six-month sabbatical.

Dr. Gait served on the reopening task force and on the gallery development team for the Discovery gallery. Dr. Lumbers completed a three-year term on the tenure committee. Dr. Mandarino served on the ROM collections committee and as ROM coordinator for the NSERC earth sciences grant selection committee site visit. Dr. Wicks completed a three-year term on the ROM promotion committee.

Volunteers

The department would like to pay tribute to the volunteers and research associates who have contributed so much to our activities. In particular their help with the collections is much appreciated.

Department of Ornithology

Allan J. Baker

Curator in Charge

The Ornithology Department houses almost 145 000 items, including mounts, skins, skeletons, specimens prepared whole in alcohol, eggs, and nests. The collection is by far the largest and most significant in Canada. All twenty-seven orders of birds in the world are well represented, and the scope and size of the collection make it a provincial, national, and international resource for use by scholars, naturalists, artists, educators, governmental agencies, and the public alike. To provide more efficient access to the wealth of information contained in the collection, departmental staff have recently completed a five-year project to computerize all collection records. The completion of this project was largely due to a grant from the Museums Assistance Programme of the National Museums of Canada. Increasing numbers of requests for sophisticated information on collection holdings are now answered promptly through a terminal connected to a computer in Ottawa.

Acquisitions

Almost 1100 specimens were added to the collection in 1982–83. Our most notable acquisition was a series of fifty gallery-quality specimens of birds from Saskatchewan, including avocets, willets, phalaropes, marbled godwits, sage grouse, and chestnut-collared longspurs. These specimens are currently being prepared by taxidermist Mr. Peter Knapton of Exhibit Design Services for display in the new ornithology gallery. Dr. Ross James, associate curator, and technician Mr. Stephen Nash acquired eighty specimens of warblers, flycatchers, sparrows, and vireos from Ontario for gallery mounts.

Other acquisitions included 300 mynas from Hawaii and India, 200 chaffinches from the Azores and Canary Islands, 50 European tree sparrows from Illinois, and 10 European oystercatchers from Great Britain. We also received 300 specimens of ring-billed gulls from researchers at the University of Toronto.

Field Work and Research

The principal objectives of our field work programme are to acquire first-class display material for the new gallery, to expand our teaching and reference collections, and to continue our long-term research projects funded by outside agencies.

Dr. Jon Barlow, curator, received a three-year NSERC grant to continue his studies of the evolution of European tree sparrows in Illinois, and of the ecology and vocal behaviour of vireos in Texas and the Caribbean. Mr. Nash found the first known nests of the St. Andrews vireo on St. Andrews Island

(Colombia) in the western Caribbean, and recorded the songs of this little-known species.

Dr. James continued his work on the distribution and abundance of breeding birds in Ontario, and contributed census data to the Ontario Breeding Bird Atlas in preparation. He also collected specimens for the ornithology gallery and for the teaching and research collections.

Grant support from NSERC enabled Dr. Allan Baker, curator in charge, to visit India to collect samples of mynas to compare with newly evolving populations introduced by settlers to Australia, New Zealand, Fiji, South Africa, and Hawaii. Mr. Nash collected a sample of mynas from Hawaii for genetic and morphologic analysis. Dr. Baker also visited the Azores, Madeira, and the Canary Islands to begin a study of the evolution of isolated populations of chaffinches.

Curatorial assistant Mr. J.A. Dick, gathering data for a book on tinamous, visited the National Museum of Natural History in Washington, D.C., to examine a large collection of this evolutionarily important family of birds.

Loans

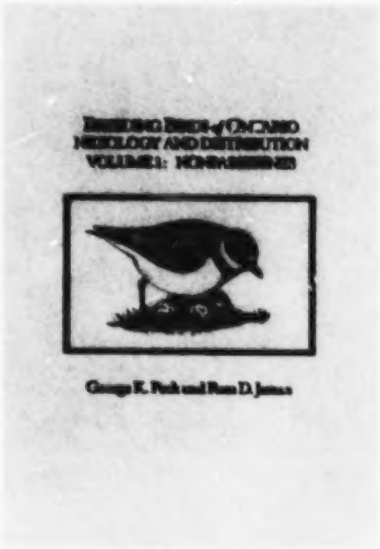
A total of 173 loans was made to wildlife artists in Canada. Loans were also made for educational and scholarly purposes to such diverse agencies as the Metro Toronto Zoo, the Ontario Ministry of Natural Resources, the School for the Deaf in Milton, the British Columbia Provincial Museum, the American Museum of Natural History, and the Manomet Bird Observatory in Massachusetts. Interdepartmental loans were made within the ROM, principally to Exhibit Design Services and the new Discovery gallery. Slides from our photographic collection were loaned to the "Canada AM" show.

Teaching and Lecturing

Dr. Baker taught the course "Statistical Methods of Classification in Biology" at the University of Toronto and supervised three graduate students in zoology. With Dr. Chris McGowan of Vertebrate Palaeontology, he delivered six lectures in the continuing education lecture series on *The Theory of Evolution: Past, Present, and Future*. At the meeting of Ontario ornithologists at Trent University Dr. James spoke on song-learning in yellow-throated vireos, and he lectured the Richmond Hill Naturalists' Club on bird song. Dr. James also taught a continuing education course "Introductory Ornithology" at Leaside High School. Dr. Barlow taught the course "Systematic Ornithology" at U. of T. and supervised six graduate students in zoology. He also lectured on "Ontario Flycatchers" in the continuing education lecture series *Ontario Field Notebook*.

Major Publications

This year the ROM published a major work entitled *Breeding Birds of Ontario: Nidiology and Distribution: Volume 1: Nonpasserines* by research associate Dr. George Peck and Dr. James.



Breeding Birds of Ontario: Nidiology and Distribution: Volume 1: Nonpasserines by George Peck and Ross D. James.

Breeding data and distributions of 143 species presented here are an invaluable tool to management and conservation authorities, in addition to being an excellent guide for both ornithologists and the public.

Other Public Service

Mr. Dick and Dr. Baker assisted the Young Naturalists Foundation in developing a computerized ornithology program for educational use. Mr. Dick also carried out his annual commitment as a judge of the taxidermy exhibits at the Canadian National Sportsman's Show. Dr. Baker continued to act as an ornithology consultant to *Owl* and *Chickadee* nature magazines. Dr. James served as secretary of the Ontario Ornithological Records Committee and as a member of the technical advisory committee of the Ontario Breeding Bird Atlas. Dr. Barlow served another term on the publications committee of the Ontario Museum Association.

Appointments, Awards, and Honours

Dr. James was elected editor of the newsletter of the Canadian Society of Ornithologists, and Dr. Barlow was appointed to the council of this body. The ornithology subsection of the Committee on the Status of Endangered Wildlife in Canada was chaired by Dr. James. Dr. Barlow was reelected editor of the *Bulletin* of The Wilson Ornithological Society, and was elected vice-president of the Cooper Ornithological Society. He was also appointed to the programme committee for the 19th International Ornithological Congress and to the graduate faculty of the museum studies program at U. of T.

Department of Vertebrate Palaeontology

Christopher McGowan
Curator in Charge

After what seems to have been a long time, even for palaeontologists, we are now back to business as usual. The transition began in early September 1982 with the move of our departmental offices to their permanent location in the curatorial centre. Even before the last of the boxes had been unpacked, the dinosaur gallery was opened to the public, but it was not until the following June that our preparation laboratory became fully operational again.

Acquisitions, Loans, Collection Management

The skull of a Jurassic ichthyosaur was acquired from a collector by Dr. Christopher McGowan, curator in charge, during a trip to Lyme Regis, England. Fragmentary marine reptile fossils were also collected from the Dakhleh Oasis in Egypt. A series of embryos and hatchling emus and ostriches was donated by the Metro Toronto Zoo, for research purposes.

Twelve loans were made, including a collection of early Canadian fishes to the Metro Toronto Zoo, dinosaurs to Simcoe County Museum, and a dodo to the ROM exhibition, *Silk Roads - China Ships*.

Dr. Gordon Edmund, curator, obtained a federal grant to finance a pilot project in computer cataloguing. The three students hired for the project concentrated their efforts cataloguing the Pleistocene fossils, relevant to Dr. Edmund's research project.

Mr. Gordon Gyrmov, chief technician, assisted by technician Mr. Peter May, transformed a disorganized mountain of field-jacketed specimens at the Weston Road warehouse, mostly specimens collected during the first half of this century, into shelved order. Mr. Gyrmov visited the moulding and casting laboratories of the American Museum of Natural History and an adhesive products manufacturer, also in New York, to update his knowledge of casting material.

Miss Arlene Reiss, curatorial assistant, completed a guide to the systematic collection, a project that took two years to complete and that will be indispensable for all users of the collection.

Mr. Rudy Zimmerman, machinist, completed work on the exhaust system in the casting and moulding lab, resolving a long-standing problem of fume elimination. His genius for things mechanical then turned to the planning and construction of a fine preparation centre, where rock will be removed from fossil bone. This installation was completed towards the end of June 1983.

Dr. Chris McGowan photographs details of specially cleared and stained bird embryos. (Photo: Gordon Edmund)

Public Service

This was a busy year with more media interviews than usual. The discovery of a mammoth at Rostock, near Stratford, Ontario, generated considerable interest and Miss Reiss, who was involved in its collection and subsequent study, was featured in television programmes and newspapers throughout and beyond the province.

Dr. Edmund gave a lecture on dinosaurs at the Whitby Public Library; two lectures on dinosaurs and on giant armadillos to the Florida Paleontological Society; and four addresses on the ROM, its collections, and galleries to various institutions during a study trip to Argentina.

Miss Reiss conducted a dinosaur workshop at the North York Community Centre for gifted children.

The January 1983 publication of a popular book on dinosaurs and their contemporaries, *The Successful Dragons*, by Dr. McGowan was of much interest to the media especially in Toronto. The appearance of his second book in May 1983, on the creation-evolution controversy and entitled *In the Beginning: A Scientist Shows Why the Creationists Are Wrong*, sparked interest across the country. A week's vacation spent promoting the book in western Canada resulted in more than fifteen hours of radio and television appearances.

Earlier in the year Dr. McGowan, in conjunction with Dr. Allan J. Baker, Department of Ornithology, taught a course on evolution in the ROM's continuing education programme. During the period of the course he participated in a public confrontation with Dr. Duane Gish of the Institute for Creation Research. He also gave a lecture on Mesozoic reptiles for the Royal Canadian Institute, and a lecture on bird origins for the Guelph Field Naturalists, and for the Bedford Institute for Oceanography, Dartmouth, Nova Scotia. Dr. McGowan was also the after-dinner speaker at the annual meeting of the Canadian Science Writers Association.

Dr. C.S. Churcher, research associate, gave two papers at the Symposium on Correlation of Quaternary Chronologies at York University.

Numerous enquiries from the public ranged from the question of warm-bloodedness in dinosaurs to why mammoths became extinct. Specimens brought in for identification included a whale bone from the Beaufort Sea and a deer bone from the base of the CN Tower in Toronto.

Research, Teaching, and Field Work

Dr. Edmund continued his research project on giant armadillos with a dissection of the cranial anatomy of two recent specimens, double-injected with coloured latex to show the distinction between arteries and veins. He gave papers on his research at the Society of Vertebrate Paleontology meeting in Mexico City. Dr. Edmund also taught an undergraduate course and continued to supervise two graduate students at the University of Toronto. He collected Pleistocene fossils in Florida, some of which will be used in the Mankind Discovering gallery.

Dr. L.S. Russell, curator emeritus, continued his studies on Canadian Oligocene mammals.

The work of Dr. Churcher involved the curation, identification, and description of the materials obtained from the Dakhleh Oasis, and the completion of a report on two genera of sabre-toothed cats (*Felidae* and *Machairodontinae*) which has been accepted for publication by the Museum.

Dr. McGowan has been studying the embryonic development of a variety of flying and flightless birds, in order to investigate the relationships between them, and their relationships to the theropod dinosaurs. He continues to supervise Ph.D. student Mr. Jeffrey Thomason who is completing a study on locomotion in horses, and whose work was recently featured in the CBC series "The Nature of Things". Dr. McGowan and Dr. Churcher visited the Dakhleh Oasis Project, Egypt, collecting marine fossils of Cretaceous age. This was Dr. Churcher's fourth time participating in the Dakhleh Oasis project, organized by the Egyptian Department.

Awards and Honours

Dr. Edmund, Dr. McGowan, and Dr. Russell received research grants from NSERC. Dr. Edmund continues to serve as Canadian editor for the *Bulletin of the Society of Vertebrate Paleontology*. Dr. Churcher was elected a fellow of the American Association for the Advancement of Science in May 1983.

Staff Changes

Mr. May, whose artistic and technical talents we have enjoyed for five years, left us in December 1982. We wish him well in his new location at the Tyrrell Museum of Palaeontology in Drumheller, Alberta.

In January we welcomed Mr. Pierre Lacasse who replaced Miss Ingrid Birker. Although his official position is part-time cataloguer, our staff shortage has prompted him to turn his hand to many things including mammalian anatomy.

Mr. Brian Iwama has been working on a temporary basis, cheerfully undertaking everything from installing equipment to photographing specimens. Our Experience '83 student, Miss Christine Blake, was engaged in the making of casts of teeth and claws for sale in the ROM shop.

Conservation Department

George deW. Rogers

Head

Special Projects

The cleaning and restoration of the three large Chinese wall paintings from the Bishop White gallery was completed during 1982–83. The project staff consisting of Mr. Eric Gordon, paintings conservator, and Mr. Phillip Atkinson and Ms Janice Brodie, conservation technicians, under the supervision of Ms Elizabeth Phillimore, conservator, special projects, was augmented by three part-time staff — Mr. Kostas Xenarios, Mrs. Mary Faghani, and Mrs. Mariana Hustiu. Ms Phillimore contributed an article on this project to the special July/August 1982 issue of the *Canadian Collector* magazine devoted to the ROM reopening.

Ms Diane McKay, paintings conservator, and Mr. John Barton, paper conservator of the Provincial Archives of Ontario, collaborated on the treatment of two oil paintings on paper — one from the PAO collection, the other from the ROM collection. Ms McKay also cleaned four large Sylvia Hahn paintings in the Mankind Discovering gallery and, with the consent of the owner, treated a Robert Bateman painting.

Mr. George Rogers, head, continued his work with the ROM joint health and safety committee principally as its secretary but with emphasis on the subject of ethylene oxide fumigation within the Museum, and attended a conference on this subject in New York City held by the Center for Occupational Hazards.

Ms Susan Richardson, documentation officer, worked on the condition reporting requirements of *The Search for Alexander* and the *Treasures from the Tower of London* special exhibitions, travelling to New York and London, and will conclude the requirements in July 1983 by travelling to Greece. Mr. Chris Toogood, metals conservator, and Mr. Enno Busse, conservation technician, worked with Mr. Rogers on the special microclimate control for these exhibitions and monitored the conditions of the objects and their environment throughout the display at the ROM.

Prior to the installation of both exhibitions, the department provided treatment facilities for the use of the conservators from Greece and Great Britain and, for the *Search* exhibition, Mr. Toogood and Mr. George Pawlick, ceramics conservator, treated supplementary loan material, again with the lender's express consent.

Mrs. Izabella Krasuski, textile arts conservator, with the assistance of Ms Joyce Whiteford, a recent graduate from the Queen's University Master of Art Conservation programme, nearly completed the project on the conservation of a set of very badly damaged ballet costumes from Ballets Russes.

Exhibitions, Loans, and Galleries

The department completed the treatments of objects required for the galleries that opened in September 1982.

The objects proposed for the ROM exhibition *Silk Roads · China Ships* were examined by various members of the department, special display or treatment needs were noted, and treatments were begun. Ms Susan Wilson, furniture and wooden objects conservator, travelled to Rochester, New York to consult on the loan and restoration of three pieces from the Strong Museum. Ms Marianne Webb, decorative arts conservator, began the long process of affixing $1000-worth of finely cut abalone shell pieces to an inlaid lacquer chest for this exhibition.

The same process of examination, recommendation, and treatment by members of this department is well underway for the 1984 exhibition *Georgian Elegance and a New Land: 1745–1820*.

Work on the new galleries continued. Mr. Pawlick with Mr. Busse prepared the Ming Tomb gallery for public display and worked on objects for the Discovery gallery. Mr. Busse also worked on some sculptures for the members' lounge, and with Mr. Toogood on metal objects for the Discovery gallery. Ms Julia Fenn, ethnographic conservator, continued to ready objects for the New World archaeology and ethnology galleries, and for more immediate exhibition. She has also been investigating, with some success, the consolidation of objects composed of rotted silk and the safe mounting of decorated birchbark objects. Ms Joan Pletsch, conservation technician, worked with Ms Fenn and also maintained the hygrothermographs and charts that monitor the temperatures and relative humidities of selected locations within the Museum.

Ms Webb is completing the polychrome figures for the opening of the Bishop White gallery. Mrs. Krasuski has been working on the conservation of textiles that will be used in both the Mediterranean World cluster and a new gallery slated for the fall of 1983. Ms Richardson continued the condition reporting of all objects entering or leaving the ROM and had the help over two summers of Ms Carla Fleck, summer student. Ms Anneliese Anthony, departmental secretary, referred public enquiries, and helped with the condition report documentation workload.

Ms Marianne Webb, decorative arts conservator, treats a Japanese lacquer chest with abalone inlay.

Training and Lecturing

Mr. Rogers continued as the ROM representative on the museum studies programme committee, University of Toronto, and gave a talk on the dangers to works of art in transit at an April 1983 seminar held by the Intermuseum Association, Oberlin College, Ohio. At the request of Extension Services, he hosted a joint departmental staff meeting on the subject of hazards and safeguards in the movement of artifacts and later lectured on this subject to the members of the ROM provincial extension advisory committee.

Ms McKay and Ms Webb gave a joint lecture on conservation to a group at Glendon College, York University.

The department also provided internship training for students of the Queen's University graduate programme in conservation.

Visits and Tours

This year the department was visited by students of museology courses in Illinois, New York, and Ohio and by members of the ROM 1983 tour to China.

There were visits by conservators, including Mr. Sten Holm, chief of conservation, Quebec Region of Parks Canada; Ms Susanne Holm, conservator, Provincial Conservation Laboratory of Quebec; and Anthony Werner, retired head of the Conservation Laboratory in Hawaii and coauthor of a seminal text on conservation of objects.

Other Public Service

The department dealt with many calls from the public seeking advice on conservation problems and services and referrals were made to private conservators.

Ms Gillian Watts, conservation advisor for the Ministry of Citizenship and Culture, worked in the department periodically for professional development.

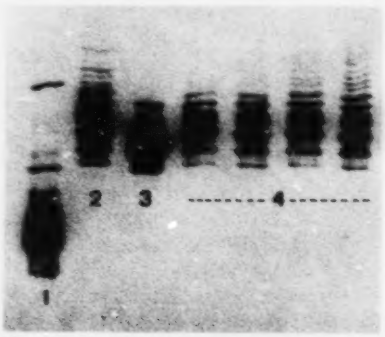
Mr. Rogers served on an advisory panel for the conservation assistance programme of the National Museums of Canada in June 1983.

Ms Webb, Ms Fenn, and Ms Richardson each contributed columns to the "Conservation Column" of the Ontario Museum Association *Quarterly* during the year.

Laboratory of Analytical Systematics

Kian E. Chua

Supervisor



Shown above are the "fingerprints" of the proteins found in the flesh of three species of Ontario fish: 1 is pike, 2 is sucker, 3 is yellow pickerel, and 4 is sucker from seized fillets. The laboratory used a special technique called isoelectric focusing electrophoresis to identify the fish from flesh.

The laboratory continued to provide histological and biochemical services for research to life science curators in the Museum and to professors and graduate students in the Department of Zoology, University of Toronto. While some of the assignments involved routine procedures, others required considerable investment of time to develop new methods to obtain the information required.

Projects undertaken during the past year included histological sectioning and slide preparation of tissues from birds and tubificid worms; and electrophoresis of hair and other tissues for a comparative study of enzymes essential in alcohol metabolism by humans, a project which involved the development of an ultra-thin gel technique for iso-electric focusing. The laboratory performed microdensitometric analysis of DNA in blood cells from an endangered central European mud minnow *Umbra krameri*. In addition, staff obtained data for systematic study of the world Esocoidei (pikes and allies).

In a project undertaken for the Ontario Ministry of Natural Resources, laboratory staff are applying electrophoresis in establishing "finger-prints" of proteins in the flesh and eggs of species of Ontario fish. These reference standards permit identification of fish from either flesh or eggs alone, and have been introduced as evidence in court cases to secure convictions for illegal fishing. Because of the unusual expertise of this laboratory, combined with that of the Department of Ichthyology and Herpetology, the ROM is able to provide this unique service to the Ministry.

Library and Archives

Isabella Guthrie-McNaughton

Acting Head Librarian

The library continues to serve its many and varied users in its role as the bibliographic centre of the Museum. Museum staff and University of Toronto students are still our most frequent patrons, but we are seeing steady use of the collection by the general public as well.

The library received two splendid donations of books and journals from the personal collections of long-time ROM staff members Mrs. Dorothy Burnham and Dr. Douglas Tushingham.

Statistics

More than 2200 records including items from the Far Eastern and Canadiana libraries were added to the library's central cataloguing database.

The library was in the fortunate position of being able to maintain its current subscription list of 440 journals, but was largely unable to add any new titles to this list. About 1200 serial titles are received annually through our extensive exchange of publications programme. The library's most notable purchase this year was a numbered copy from the limited edition of *Charles Darwin, 1809-1882: A Centennial Commemorative*, which was added to our rare books collection.

The library circulated 3591 items within the Museum, sent 687 items and received 593 items on interlibrary loan, and sent a total of 650 items to the bindery.

Staff Activities

This has been a year of staff changes for the ROM library. After six years as head librarian, Mr. Eugene Wilburn left the Museum library in November 1982 to pursue a new career direction in the computer field.

Mrs. Isabella Guthrie-McNaughton, assistant librarian, assumed the responsibilities of acting head librarian. Mrs. Marian Press was promoted to associate librarian. Miss Judy Rittersporn, library assistant, assumed the position of library technician in charge of subscriptions, gifts, and exchanges. Mrs. Charlotte Goodwin, library assistant, joined the library staff in November 1982, assuming the responsibilities of the library's kardex and mail functions. Miss Alison Leapman, a U. of T. Faculty of Library and Information Science student, joined the library staff on a part-time basis in November 1982.

In conjunction with *The Search for Alexander* and *Treasures from the Tower of London*, Mrs. Guthrie-McNaughton prepared reading lists available to interested library visitors. Mrs. Pat Trunks, library technician, compiled the annual staff bibliography, included in this annual report.

Public reading area where current periodicals are displayed.

In May 1983 Mrs. Press and Mrs. Trunks attended a BIOSIS seminar and Miss Leapman attended a Zoological Record seminar at the Science and Medicine Library, U. of T. Mrs. Champa Ramjass, library technician, attended workshops on automated cataloguing. Ms Thea Todd, library technician, and Mrs. Guthrie-McNaughton attended a demonstration of an automated acquisition system. Mrs. Guthrie-McNaughton represented the Museum library at meetings of the U. of T. Council of Campus Libraries, and its subgroup on catalogue automation. She was also a participant in a workshop on the use of DIALOG, a computer on-line literature searching system. In April 1983, the library gave two on-line demonstrations of the DIALOG system to ROM staff.

Staff members were active this year as hosts of library tours, notably for U. of T. Council of Campus Libraries, Toronto Board of Education librarians, and for the Museum's docents. The library hosted the March 1983 meeting of the Librarians' Association of the U. of T.

Lectures and Publications

Mr. Wilburn attended the Canadian Library Association Annual Conference in Saskatoon, in June 1982. He presented two papers at a workshop on "Microcomputers for Libraries: How Useful are They?" that were later published by the Canadian Library Association. In September 1982, Mr. Wilburn led a one-day workshop on personal computers for the York University Library.

In September 1982, Ms Sharon Hick, associate librarian, spoke at an Ontario Museum Association seminar on resources in the Museum library for the study of Canadian material history. She also presented a paper entitled "Availability versus Access: Using the Library Collections" at the Canadian Museums Association annual meeting in Saskatoon in May 1983.

Mrs. Press gave a lecture to the museum studies students at the U. of T. on the setting up and administration of museum libraries.

Archives

Mr. William Roedde, Museum archivist, reported that a number of special collections were added to the Museum archives, including the papers of Fritz Johansen, who led an Arctic expedition in 1913, and of Mrs. O.D. Vaughan, a former member of the Museum board of trustees.

Considerable use was made of our special collections, especially the papers of John Kerr, a fish and game inspector in the Hamilton area of Upper Canada; Percy Taverner, an ornithologist; and Charles Trick Currelly, the first director of the Royal Ontario Museum of Archaeology.

In May 1983, the library and archives presented a microfiche copy of the diaries of John Kerr to the Special Collections Division of the Hamilton Public Library.

The archives also received the much appreciated volunteer efforts of Mrs. Helen Downie, who is continuing to organize the many exhibition records now located in the archives collection.

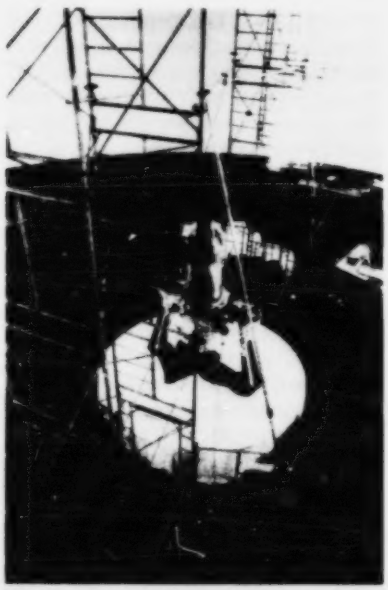
McLaughlin Planetarium

Thomas R. Clarke

Head

With the opening of the Museum, the Planetarium was again physically connected to the ROM. The new atrium ramp allowed visitors to pass to and from the ROM and, more importantly, restored access for the handicapped. Surprisingly, the increased visitor traffic on weekends was offset by decreases at other times; this suggests that the loyal Planetarium patrons were taking in the Museum but that there were few new Planetarium visitors in the ROM reopening crowds despite a very favourable combined admission policy.

In January the inner projection dome received a long-overdue washing and a complete inventory was begun. During the year our slide collection of about 7800 slides was reorganized.



Plastic sheeting and scaffolding filled the Star Theatre for two weeks in January while the projection dome was washed. (Photo: C. Sasaki)

Star Theatre Programmes: Public Shows

During 1982–83, six different public shows were presented including four new productions. The range of topics demonstrates the variety of material that can be integrated with astronomy and presented in a star theatre. As examples, *The Climate Connection* dealt with continental drift, climatology, and volcanoes, while *Origins* delved into biochemistry and evolution.

Regularly scheduled programmes were as follows: *Science Fiction, Science Fact*: 4 June to 26 September 1982 (written and produced by Mr. Paul Deans); *Picture the Stars*: 1 October to 12 December

Mr. Ian McGregor explains some fine points of planetarium technique to school children. (Photo: C. Sasaki)

1982 (by Mr. John Kenny); *The Christmas Star*: 16 December 1982 to 2 January 1983 (by Mr. Kenny); *The Climate Connection*: 20 January to 1 May 1983 (by Mr. Deans); *Earth, Moon, and Sky*: 21 March to 3 April 1983 (by Mr. Ian McGregor); *Origins*: 6 May to 5 September 1983 (by Mr. Kenny).

Highlights of the shows included the use of a six-projector "all-sky"; a 16-mm animation of the space shuttle deploying the large space telescope; an erupting Mt. St. Helens; and a rippling underwater scene of a coral reef. In addition, during each week set aside for show installation, *Star Talks* dealing with the current night sky were presented.

School Shows

For this year, the Planetarium used the same selection of age-graded presentations, but made major revisions to the grade 5–6 show, *Exploring the Planets*.

A small but increasing number of hearing-impaired students are enjoying school shows by means of interpreters whose hands and faces are dimly illuminated.

Light Shows

Laser Images Incorporated, who produce and operate the light shows presented in the Star Theatre, offered a number of different shows including short runs featuring popular musical groups.

Attendance

Public show attendance decreased 2 per cent to 107 354 for 915 shows over the fiscal year. The return of school groups to the Museum is very apparent with school attendance gaining 24 per cent over last year to 50 675 for 265 shows, the first time it has been in the 50 thousands since 1979. Light show attendance of 58 431 for 631 shows is down 25 per cent from a year ago. Seventy-seven special shows involving 5280 people were provided to youth groups, post-secondary students, power squadrons, professional groups, and participants in Planetarium courses.

Free admission to ROM members, first instituted as ROM galleries were being closed, has been continued. Of 4606 complimentary admissions issued, 1642 were to seniors on Tuesdays and 1954 to ROM members.

To help promote public shows a new brochure was produced and Mr. Donald Bray, manager, planetarium operations, participated in the Canadian Odysseys programme.

Gallery Development and Displays

Although there has been no progress toward permanent galleries, the second floor of the Planetarium is available for temporary shows. From 25 September 1982 through 8 February 1983, *Photography of Space: Explorations*, a photographic exhibition from the Grey Gallery was mounted in the area.

Visitors once again congregate on the plaza in front of the Planetarium. (Photo: C. Sasaki)

Technical Development

Some of the development activities that had been suspended or delayed by the many changes in Planetarium facilities were resumed this year. Dr. Thomas Clarke, head, prepared a two-year plan of expenditure for the McLaughlin Endowment that was approved. Subsequently, a theatre automation and control system was selected. The Moog synthesizers were nearing the end of their useful life and so a Synclavier II digital synthesizer was purchased which, with considerable improvement in quality, accomplished in minutes what once required hours to do.

Teaching and Lecturing

Dr. Clarke gave twelve lectures and demonstrations in the Star Theatre to a total of 1454 university students from five institutions. Mr. McGregor worked with Dr. Beck of the Department of Classics, Erindale College, to develop a seminar on astronomical references in classical literature. Mr. McGregor also gave special Star Theatre lectures to members of the Royal Astronomical Society of Canada and The Saturday Morning Club. A special programme presented twice by Dr. Clarke attracted 533 people, representatives of Power Squadrons across southern Ontario.

A very large programme of astronomy courses was organized by Mr. McGregor, including *Summer Star Gazing*, *Introduction to Astronomy*, *Is Anybody Out There?*, *Star Pictures and Star Legends*, and *Introduction to the Sky*, with a total attendance of 704. The Saturday Morning Club, the creative arts studio, and Learning Unlimited also organized courses using Planetarium staff as instructors.

Mr. McGregor and Mr. Tom Wujec, summer student, worked with Extension Services to produce another popular broadsheet, *Sky Show 82–83* on the constellations. Mr. Kenny organized and co-produced "Heavens Above", a series of fifteen-minute radio programmes on CJRT.

A total of thirteen lectures on various astronomical topics was given to outside organizations, and several staff were regular contributors to "Astronomy Toronto," a Rogers Cable community programme.

Other Public Service

Staff met a wide variety of demands for assistance in astronomy and planetarium-related projects. Dr. Clarke provided advice and materials in the planning of a number of planetarium projects in Saudi Arabia, Chile, New Zealand, Finland, and for the National Museum of Natural Sciences, Ottawa. Mr. Deans met with planners of a science park in Paris, France.

Mr. McGregor continues to produce two or three messages a month for our astronomical information line as well as "Sky Notes" on popular events such as comets and eclipses. The Planetarium continued to provide information in response to enquiries from the public. Through the course of the year there were seventy-five interviews with radio, TV, and print media. Thirty loans totalling 473 slides were made to students, artists, advertising agencies, and publishers.

Mr. McGregor completed his third and final year as president of the Toronto Centre of the Royal Astronomical Society of Canada, but continues as member of National Council of that society and as editor of their national newsletter. He also served as secretary-treasurer of the Planetarium Association of Canada.

Dr. Clarke is completing the second and final year of his term as president of the Planetarium Association of Canada. In that capacity, he has served on the advisory council to the Canadian Museums Association and participated in developing that association's response to the recommendations of the Applebaum-Hébert Commission.

Preparators Department

Vivian Peverley

Head Preparator

The early part of 1982 was a busy period for the Preparators Department, as a great number of brackets and mounts had to be designed for the display of materials in the new galleries, while at the same time the final movement of the collections from temporary storage to permanent departmental areas was in progress.

During the year 1982–83 preparators were involved in five temporary exhibitions, two of international fame — *The Search for Alexander* and *Treasures from the Tower of London*. Mr. Vivian Peverley, head, visited the New York Metropolitan Museum of Art to observe the dismantling of *The Search for Alexander* exhibition and to escort it to the ROM. He also attended a workshop and seminar at the Philadelphia Museum of Art. Mr. Peverley became a professional member of the Northeast Museums Conference.

The department is presently preparing for the Museum's first in-house travelling exhibition, *Silk Roads - China Ships*. This exhibition is a double challenge because the department must make mounts, brackets, and other display material, and also design and fabricate shipping crates. The set-up and dismantling of this exhibit while on tour in Canada and the United States will be done by members of the department.

Since February 1983, members of the department have produced mounts for the various objects in use in the Discovery gallery, and have developed new mounting techniques.

Help was given to Extension Services in preparing three new travelling exhibits. At filming sessions with the CBC, members of the department handled artifacts for the participating departments. The department also placed marble statuary from the Far Eastern collections in the members' lounge.

Twenty-four incoming and twenty-six outgoing loans were packed or unpacked by the department.

On behalf of the Ontario Museum Association, Mrs. Joyce Lister, preparator, organized a workshop seminar within the departmental area dealing with the handling of art objects, packing, and packing materials.

Mr. Andy O'Mara, preparator, checks the fit of a special mount developed for the new Discovery gallery.

Registration Department

Sonja Tanner-Kaplash

Registrar

The most significant activity undertaken by the Registration Department during the past year has been planning and preparing for the two major exhibitions *Treasures from the Tower of London* and *The Search for Alexander*. Registration is one of the first departments to be involved in exhibition planning, and long before an exhibit actually arrives, details of shipping, handling, insurance, and accompaniment must be finalized and incorporated into a contract.

In September 1982 Mrs. Lissa Peck, then loans coordinator, was appointed assistant registrar. This key position had been vacant for some time, and the department was especially pleased to have the appointment made during this busy period. As a result, one other internal staff promotion took place in the loans section of the department.

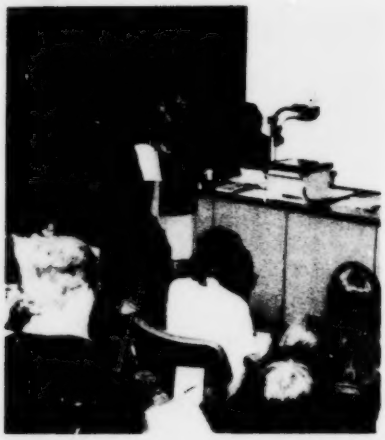
Staff in all three sections of the department have now trained on word-processing equipment, which is in daily use. Computer applications are expected to play a crucial role in streamlining procedures, documentation, and reporting over the next year.

Acquisitions and Records Section

During 1982–83, the total number of acquisitions processed for the art and archaeology departments increased twenty percent over the 1981–82 figure. This total included more than sixty gifts requiring receipts for income tax purposes, and nine applications for certification under the Cultural Property Export and Import Act. Donations certified in this manner must be of outstanding national significance, as determined by the Ottawa-based review board.

Under the supervision of Ms Gillian Pearson, acquisitions and records coordinator, this section continued to provide assistance and guidance to a wide variety of outside organizations. This year, visitors were particularly interested in demonstrations of the PARIS computer system, which links the Registration Department to the Canadian Heritage Information Network in Ottawa. Visitors included groups from Parks Canada, Hamilton Wentworth Historical Board, students from the certificate programme of the Ontario Museum Association, and members of the Canadian Association for Sports Heritage.

In addition to processing new acquisitions for the collections, this section has remained actively involved in recording new locations for Museum collections, as new storage facilities become available, and the process of reorganization is undertaken by curatorial departments. Well over 100 000 records were updated during the past year.



Participants at a three-day seminar on "Registration, Records, and Research", part of the Ontario Museum Association basic certificate in museum studies. The seminar, given at the ROM, was organized by Mrs. Sonja Tanner-Kaplash and Mrs. Lissa Peck.

The day-to-day supervision of the computerized location record project is the responsibility of Mr. Gary Friedman, registration assistant, assisted by three recorders and a team of summer students.

Customs and Shipping Section

Mr. Barry McQuade, customs and shipping coordinator, was assisted on a half-time basis by Mrs. Leigh O'Mara, registration assistant. There was an increase of more than twenty percent in the number of shipments handled by the section in 1982–83 as compared to 1981–82. Fortunately, the efficiency of the section has been enhanced by the application of computer programming and word-processing skills.

Preparations for the two major exhibitions were the highlight of this year's work. In December, Mr. McQuade spent three days in New York planning and coordinating the main shipment of *The Search for Alexander* material from the Metropolitan Museum of Art. He and Mrs. O'Mara worked with the loans section, Museum security, and other staff to ensure the safe arrival of many other loans contributed to this exhibition by lenders from across the United States and Europe. On two occasions, Mr. McQuade travelled to the United States border to assist in customs clearance of major shipments.

Among many imports arranged for various ROM departments, the customs and shipping section expedited the arrival of gift merchandise from around the globe for the reopening of the ROM shop. Other imports included a large collection of archaeological finds from the Dakhleh Oasis for the Egyptian Department, while exports included more than a tonne of equipment for an expedition of ROM ichthyologists to Fiji.

Loans Section

The focus of loans section activity shifted this year, with a modest decline in outgoing loans and a dramatic increase in incoming material for special exhibitions. Registration assistant Ms Sheila Knox, and her successor, Ms Susan Haight, under the supervision of the loans coordinator, Ms Heather Maximea, worked with the customs and shipping section and with other departments to make the wheels run smoothly for the ROM reopening exhibitions and for the Robert Bateman exhibition *Images of the Wild*. Preparations for *The Search for Alexander* required loans from twenty-eight separate sources; planning is well underway for similar loans for the forthcoming exhibitions *Silk Roads · China Ships* and *Georgian Elegance and a New Land: 1745-1820*.

Although museums and galleries borrowing from the ROM collections must take a long, hard look at exhibition budgets, outgoing loans indicate that borrowers are still eager to include ROM material in their exhibits. Major loans this year included the loan of seven Chinese paintings to the Art Gallery of Greater Victoria and loans of Paul Kane paintings from the Ethnology Department to major exhibitions in Winnipeg and West Germany.

Teaching, Lecturing, and Publications

In addition to satisfying requests for occasional lectures on specific topics, the staff of the department organized a colloquium on *Current Issues in Collections Management: The Legal Environment*, offered as part of the master in museum studies programme at the University of Toronto; and a three-day seminar, *Registration, Records, and Research* as part of the Ontario Museum Association basic certificate in museum studies. In addition, departmental staff continue to support a number of professional associations at the local, national, and international level by attending conferences either as delegates or invited speakers.

Other Public Services

As in the past, all three sections of the department answered enquiries on a wide range of topics and provided consultative services to sister institutions, government agencies, and the general public. In May 1983 Mrs. Sonja Tanner-Kaplash was appointed by the Ministry of Citizenship and Culture to be the Ontario representative on the Federal-Provincial Working Group on Indemnification; in addition, she was involved in developing the Ontario Fine Arts Insurance Plan, announced by the ministry in June 1983.

Development and Membership Services

Gloria J. Faller

Acting Head

The past year was marked by three important events. The reopening of the newly renovated Museum brought back the ROM's loyal members, and with them, many new ones. The department moved into new quarters in the main building, accessible to members and potential members, and a new computer was installed to assist in providing the best possible service to members and donors.

The Museum is grateful for the continuing support of its members and corporate sponsors and was pleased during the year to be able to offer various programmes and benefits for members.

We were saddened by the untimely death of the department's head, Mr. E.R. (Ned) Larsen in April 1983. Of necessity, some of the plans developed by the late Mr. Larsen were postponed and are now being updated.

Development Office

With the completion of the first phase of the Museum's fund-raising and completion of the building side of the renovation and expansion project, energies are now focused on the redemption of pledges and planning the fund-raising activities for ongoing gallery development.

The Museum introduced this year a new form of annual corporate membership. The Development Office is responsible for overseeing this programme. A number of corporate members have already joined the ROM and plans are under way to attract more in the coming year.

Corporate sponsors also helped to make two special exhibitions possible. The ROM gratefully acknowledges the generous assistance of Time Incorporated for *The Search for Alexander*, and of Spar Aerospace Limited for *The Photography of Space Exploration*.

Two fund-raising events organized by Museum staff raised more than $155 000 during 1982–83. Through the generosity of Miss Mary O'Hara, who donated her services, the Programmes and Public Relations Department organized a special fund-raising concert especially for members of the Museum. This internationally renowned artist attracted a full house a week after tickets were offered to members. As a result, the Museum's gallery development fund gained $5621.

Mr. Ron Miles, head of Education Services, again organized and coordinated the second annual "Run for the ROM". This year the event was jointly sponsored by Nike and Labatt's Lite, whose donations covered expenses. Forty-eight teams of

A view of the new Members' Lounge on the top floor of the terrace galleries building.

twenty runners ran three-mile laps around Varsity Stadium for a full 24-hour period from 8 p.m. on 10 June to 8 p.m. on 11 June. The teams raised just over $150 000 for gallery development.

Membership Office

Members were offered several opportunities during the year to attend previews of new galleries and special exhibitions. On 22 September 1982, life and upper category members and major donors were invited to the first of two receptions to celebrate the reopening of the ROM. Annual members were invited to the second day's festivities on 23 September. The Museum then opened to the public on 24 September.

A reception was held for life and upper category members to preview the very popular Robert Bateman exhibition *Images of the Wild*. The two days preceding the public opening of the ROM's first two major exhibitions were set aside for Museum members — 3 and 4 March for *The Search for Alexander* and 17 and 18 March for *Treasures from the Tower of London*. On the evening of 18 March, the Members' Volunteer Committee organized a very successful fund-raising party for the official opening and viewing of *Treasures from the Tower of London*.

On 16 May the elegant new members' lounge opened on the top floor of the terrace galleries building. It has quickly become a popular meeting place for members and their guests for lunch, afternoon tea, dinner, or drinks.

Membership has risen during the past year to 8576, which represents a net gain of 2729 for the year.

Once again, Development and Membership Services wishes to express sincere thanks to the Members' Volunteer Committee for continued support and assistance. Their cheerful willingness makes our joint efforts a pleasure to undertake. The Museum is also enormously indebted to the more than 800 members who so enthusiastically and ably assisted in the manning of exhibitions — a truly remarkable performance.

Education Services

Ronald Miles

Head

During 1982–83 the department was engaged in processes of renewal, reimplementation and adaptation. The reopening of the Museum in September 1982 began with a spirit of homecoming for all the school classes who had eagerly anticipated coming back to the ROM. The in-school programme was gradually phased out as the Museum school visits programme geared up. The department moved for the third and final time to permanent quarters in level 2B, terrace galleries building in February 1983. A separate schedule of school classes for the two major exhibitions was processed on the department's new acquisition, a microcomputer. The creative arts programme resumed operation of The Saturday Morning Club and Art Instruction in April 1983. The continuing education programme relocated to the newly refurbished ROM theatre and the Discovery gallery moved toward reopening in mid-1983 in its new location. A total of 94 272 people participated in the above programmes in 1982–83. "Run for the ROM", organized by the department, closed the year by surpassing the 1982 record for fund-raising in this second 24-hour event.

School Visits

"Rediscover the ROM" was the theme of conducted lessons by Education Services teaching staff from 28 September 1982 to 1 March 1983.

A dedicated group of Museum volunteers, with a few new additions, reconstituted the group of twenty Monday morning volunteers. Coordinated by Mrs. Pat Bolland, teacher, this group contributed 1400 hours of service to assist 10 300 visitors, from kindergarten to grade 3, to the ROM from October through February.

Beginning in March, conducted classes were suspended in order to accommodate visitors to the special exhibitions. The total attendance for all school classes (excluding special exhibitions) in the main building and Sigmund Samuel Canadiana Building was 83 505.

In-School Programme

The in-school programme that maintained service to the Metropolitan Toronto schools during Museum closure was phased out this year. Visits were made to Scarborough and York Board schools where 7957 students participated in social science or natural science lessons. Museum teaching staff enjoyed the experience but are pleased to resume the normal pattern of teaching in the ROM galleries.

Miss Alice Chrysler, teacher, continued to provide a unique demonstration of early musical instruments based on the ROM's collection. During

Through Education Services, school groups such as this grade-four class enjoyed their tour of *Treasures from the Tower of London.* (Photo: Bob Boxall, Thomson News Service.)

the year she organized an activity day for music specialists from the Metro boards in response to their desire to use the ROM as a resource for the music enrichment programme.

Special Exhibitions

Mr. Arthur Jamieson, teacher, served on the *Treasures from the Tower of London* design team, Mr. Janis Zibergs, teacher, served on *The Search for Alexander* design team, and Mr. Ron Miles, head, served on both of these and the *Silk Roads - China Ships* design team. Mrs. Pat Bolland, teacher, served on the *Georgian Elegance and a New Land* design team.

Mrs. Gail Boulay and Mrs. Pat Bishop offered French-language service as resource people for both special exhibitions.

Preparation began in the fall of 1982 for Education Services' programmes for *The Search for Alexander* and *Treasures from the Tower of London* exhibitions. Special advisory panels of school teachers from the Metro system were recruited to assist in developing teachers' resource kits. Mr. Zibergs headed the committee for the kit entitled *Alexander the Great,* and Mr. Jamieson for the booklet entitled *Arms & Armour.*

Fifty-seven volunteers from the Members' Volunteer Committee and Museum volunteers and six part-time teachers were trained for each of the twenty-four stations of duty beginning with the arrival of classes at the student entrance. The new group entrance facility was repeatedly tested by the arrival and departure of approximately 2000 students in a five-hour period each school visitation day. School attendance for *The Search for Alexander* was 19 735 over 29 days, and 16 528 over 23 days attended *Treasures from the Tower of London* for a total of 34 428. The great success of the entire undertaking is owed in no small measure to our part-time staff and ROM volunteers.

Continuing Education

Mrs. Georgette Frampton, supervisor of office and support staff, planned and coordinated the presentation of five new lecture-discussion series. In *The Theory of Evolution: Past, Present, and Future,* Dr. C. McGowan and Dr. A. Baker presented a fall series of six evening lectures to a total of 766 people. *Canadiana for the Collector* followed in a series of five lectures with a total attendance of 372 people. In January 1983 *Arms, Armour, and Courtly Splendour,* with a total attendance of 607 people, began a five-week series as a preparation for the *Treasures* exhibition. In April, *Alexander the Great: His Time and His Legacy* was attended by 819 people for six weeks to complement *The Search for Alexander. Ontario Field Notebook* closed the programme with a series of four lectures which 194 people attended. The total attendance for this year's programme was 2596 people. Throughout the programme volunteers served refreshments; their help was most appreciated.

Teachers' Workshops

Workshops and orientation tours were in great demand by teachers who wished to make use of the Museum for curriculum-related studies. A total of 668 teachers was accommodated in programmes planned and coordinated by Miss Nancy Gahm, teacher. Mr. Jamieson planned three special evenings for teachers in March as previsit orientation for the special exhibition; 707 teachers attended these popular events. A half-day programme, *The* ROM *as an Educational Resource,* was presented in Waterloo for 200 teachers by Mr. Miles.

Creative Arts Programmes

Ms Elaine Rousseau was appointed manager in September to plan reopening of The Saturday Morning Club (SMC) and Art Instruction programmes, which began in April. With the assistance of Ms Anne Roberts, on sabbatical from Seneca College, staff and volunteers were recruited and new programmes planned. Registration for SMC was 102 and 38 adults attended art classes, for a total of 4200 hours of instruction.

Discovery Gallery

The gallery was unable to reopen, as previously planned, in the spring of 1983, but Mrs. Frances MacArthur, Discovery gallery manager, and the gallery design team completed plans for reopening in July 1983. Mrs. Marilyn Jenkins, teacher, served on the gallery design team and developed components for the gallery.

FOROM

Under the direction of Mr. Jamieson, FOROM's weekly film series was varied with visits to the special exhibitions, an exploration of the Education Services department, and sessions with teaching and curatorial staff. Mrs. Jan Fishlock and Mrs. Eleanor Smith of the MVC gave their support to FOROM.

Toronto Board of Education

Once again the Toronto Board requested a series of Saturday morning classes at the Museum for their enrichment students. Twelve children participated in the five-week programme conducted by Mrs. Jenkins.

The Department's Quarters

The new creative arts studio is the operational base of The Saturday Morning Club, Art Instruction, and other informal educational programmes. It includes office space, two work areas, a flexible storage/clean-up area and special equipment for creative activities. The Education Services space in the new terrace galleries building contains four multipurpose classrooms, a meeting room, a departmental library, and office space.

Staff

Mr. Miles and the teaching staff continue to contribute to gallery design teams and committees. Mrs. Robin Howe completed her second year of secondment from the York Borough Board of Education and was granted a one-year extension. Mrs. Joan Livesley, Mrs. Judy Gorman, and Mrs. Barbara English rejoined the staff as part-time teachers after two years, and Mrs. Pat Bishop rejoined us after a ten-year break.

Mrs. Mary Davis returned to the department as student receptionist in July after having been at the Planetarium during closure. Mrs. Frederica Fleming did noble duty as the student group organizer. Mrs. Yolanda Grimaldi assumed the position of scheduler in September, and Miss Susan Wrangham joined the staff as department secretary. Mrs. Jan Millard joined the staff in January as accounting clerk typist.

Mr. Miles planned the administrative organization of the 24-hour relay "Run for the ROM"; Mrs. Jeanne Parkin, project coordinator, members of the Education staff, Programmes, and Extension Services staff were responsible for implementing specific details.

Exhibit Design Services

Lorne Render

Head

The 1982–83 year was a very busy but rewarding year for Exhibit Design Services. The department's staff is involved in every stage of the development of a gallery or exhibition. They plan, design, build, and install the ROM's galleries, exhibitions, and travelling exhibitions as well as all special and temporary exhibitions on view at the Museum.

On reopening day, 24 September 1982, the first new galleries in two clusters, the life sciences and the Mediterranean World, and the dinosaur gallery were ready for the return of visitors to the ROM. Throughout the year, more new and refurbished galleries were opened, while planning and preparation continued for more new galleries.

During the same period, two major international travelling exhibitions, *The Search for Alexander* and *Treasures from the Tower of London: An Exhibition of Arms and Armour*, along with other temporary exhibitions, were installed. Work proceeded apace for *Silk Roads · China Ships*, the first major exhibition to be developed by the ROM for circulation. In addition, the department was involved in planning the Museum's contribution to the province's bicentennial, an exhibition entitled *Georgian Elegance and a New Land: 1745-1820*.

Galleries

In the summer of 1982, the department's attention was focused on the galleries under construction for the reopening of the Museum. Five galleries in the life sciences cluster were completed: evolution, arthropods, invertebrate zoology, reptiles, and botany. The evolution gallery may well be the only gallery in the world to present comprehensive, up-to-date information on the evidence for the theory of evolution. The present botany gallery is scheduled to be expanded as is the gallery of living invertebrates, which will provide a glimpse of the vast diversity of the ninety-seven per cent of the animal kingdom without backbones. The arthropod gallery incorporates the key elements of the previous gallery and along with new displays will continue to be developed. The reptile gallery includes some of the models from the "Carling's Gallery of Living Reptiles", newly refurbished and set in displays designed to convey their habitats.

The Mediterranean World cluster of galleries on level 3 presents only a portion of the story ultimately to be told on this floor of the Museum. Material from the collections of the Egyptian, West Asian, Greek and Roman, and Textile departments now offers a view of early civilization in the Mediterranean world — from early farming communities in the Chalcolithic Age to Imperial Rome to the Islamic empires.

Dinosaur fans were once again able to visit the popular dinosaur or vertebrate fossils gallery, which is now provided with new lighting, climate control, labels, and audiovisual programmes. In January 1983 a gallery devoted to Old World mammals opened, with full diorama settings and individual simulated habitat cases; this represents the first phase of the new mammalogy gallery. In May 1983, the renovated invertebrate fossils gallery opened.

In June 1983, the Ming Tomb gallery was opened to the public. The gallery is the first of the ROM's East Asia galleries to go on view and is located in the terrace galleries building. A new and enlarged version of the Discovery Room, the Discovery gallery, was nearly completed at the end of the fiscal year and at that time, work on a display of favourite objects from the ROM's collections was also well underway.

Exhibitions

Concurrently designing and mounting two major travelling exhibitions, *The Search for Alexander* (5 March–10 July 1983) and *Treasures from the Tower of London* (19 March–19 June 1983), challenged the resources of the department. With much planning and hard work, the staff of the department completed the many details involved in the exhibitions. *Silk Roads · China Ships*, with ninety per cent of its artifacts drawn from the ROM's collections, also demanded much staff time and expertise during the year. Plans for *Georgian Elegance and a New Land: 1745-1820* were well underway by the end of the year.

In addition to mounting the large exhibitions, designing and producing travelling exhibition continued for Extension Services with five such exhibits mounted during the year.

The following temporary exhibitions were mounted and/or installed by the department: a ROM exhibition, *People and Places: Early Canadian Paintings* at the Sigmund Samuel Canadiana Building (25 September 1982–25 September 1983); an exhibition circulated by the Grey Art Gallery and Study Center, New York University, *The Photography of Space Exploration*, in the McLaughlin Planetarium exhibit area (25 September 1982–6 February 1983); a ROM exhibition, *Living Textures: Traditional Building Materials of the Islamic World* (24 September 1982–29 May 1983); an exhibition circulated by the National Museum of Natural Sciences, *Images of the Wild/Reflets de la Nature* (29 January–3 April 1983); an exhibition circulated by The Botanical Garden of the University of British Columbia, *Cloud Flowers: Rhododendrons East and West* (16 April–8 May 1983); and an exhibition circulated by the James Ford Bell Museum of Natural History, University of Minnesota, *Francis Lee Jaques and the Shape of Nature* (14 May–26 June 1983).

Research and Development

Exchange of information in the field of museum work is vital to the life of the department. Staff members attended several conferences throughout the year. Mr. Robert Barnett, coordinator/exhibit programming, presented a paper to the American Association of Museums in San Diego; Ms Leslie Patten, programmer, gave a paper to the International Council on Museums in London, England; and Ms Gwen Smith, programmer, gave one to the Canadian Museums Association in Saskatoon.

The exhibit programming section coordinated and planned a second-year graduate course for the museum studies program of the University of Toronto. Staff members lectured, and supervised and critiqued student projects.

Members of the art section studied diorama construction at the Natural History Museum in New York and members of the programming section were involved in various outside committees and workshops on museum work.

The scope and complexity of the Museum's new gallery development drew visitors from all walks of museum life to Exhibit Design Services where they consulted with staff in the various sections of the department.

Ms Susan Ventura, of display maintenance, puts the finishing touches to a work station in the Discovery gallery.

Extension Services

Archie H. Foss

Head

In October 1982, Extension Services moved to its new facilities in the main building of the ROM. Many of the Extension staff now have their first opportunity to work at the main building and benefit from daily association with colleagues from other Museum departments.

Two new travelling exhibits were completed for circulation by our "Discover the ROM" van and two for circulation by public carrier. Three new cases were added to our inventory of school cases travelling to schools through the province.

One of the woodblock prints from the travelling exhibit *Prints of the Great Kabuki Actors*. The Japanese game of *go* is portrayed.

Travelling Exhibits Programme

During the year, *Ichthyosaur (Sea Dragon of the Mesozoic)* and *Prints of the Great Kabuki Actors* were added to our inventory of travelling exhibits. *Ichthyosaur*, a bilingual exhibit from the Department of Vertebrate Palaeontology, includes an audiovisual programme in both English and French.

Prints of the Great Kabuki Actors consists of nineteen original woodblock prints of Kabuki theatre, and a panel unit containing related artifacts and objects. The Consulate General of Japan in Toronto has provided a background audiovisual tape entitled "Kabuki — Classic Theatre of Japan". The exhibit has generated enthusiastic responses, the most unusual being that of the Japanese Consulate which sent a television crew to tape a programme based on the exhibit. The programme will be distributed in Japan.

An inventory of twenty-two travelling exhibits was made available to communities in Ontario as well as in other provinces, and a total of 379 000 people used the resources of the ROM provided by these exhibits during the past year.

The popularity of the annual *Sky Show* poster with teacher guide continues to grow. The topic of this year's poster was the constellations, and the number of requests by classroom teachers across the province made necessary a reprint.

Discovering New Worlds Through the Scanning Electron Microscope and *Indian Rock Paintings* came out of circulation after a number of years of successful use, and *More Than Meets the Eye (Mineralogy)* was consolidated into one available exhibit.

"Discover the ROM" Van

Seven compact bilingual exhibits made up the inventory this year for circulation by the van and the driver interpreter. On each thirteen-week tour, five locations interchanged exhibits for a total of 63 000 visitors in fifteen locations across the province.

Two new exhibits were added this year: *Gods of Ancient Egypt*, an exhibit of sixteen statuettes from the Egyptian collection, and *War of 1812*, fifteen replica prints of an original ROM show, together with several artifacts and specimens.

Up in Smoke: The Golden Age of Tobacco completed its loan period and its materials were returned to the collections. Over a three-year period, it had been seen by 61 000 people in thirty-eight locations across the province.

School Services Programme

From September 1982 to June 1983, thirty-three school cases were circulated to thirty-six boards of education across the province. These cases were used by students from 501 schools, including French language schools in both public and separate school board jurisdictions.

The Story of Writing was one of the new cases produced, in duplicate, this year. Students use interpretative dioramas, large activity cards, and learning props to study the development of writing. This case was pretested last spring, and begins circulation in September 1983.

This year, letters and booking forms for our annual mailing have been translated into French. All our cases are now booked for the 1983–84 school year.

Metro Loan Programme: ROM Resource Boxes

From September to June, 141 boxes were used by 5375 Metro Toronto students, a 100 per cent increase in the use of this programme in one year. Boxes were also borrowed for use in teachers' workshops and on professional development days.

Last summer, twenty-one boxes were loaned to the Algonquin Regional Library System for use in eight community libraries. The project is being repeated in the summer of 1983.

Science education professors at Queen's University used two of our kits to present theory and practice of learning with objects to student teachers, and two associations for bright children have used our resource boxes for parent-organized enrichment classes.

Extension Services staff provided workshops to teachers, consultants, and librarians. Information has also been provided to groups such as the Norfolk County Board of Education, the Aylmer and District Museum, the Alberta Provincial Museum, the Hamilton Children's Museum, the New Brunswick Museum, and the Natural History Museum in Chicago.

Museumobile Programme

In three travel tours this year the two museumobiles made 102 community visits through seventeen Ontario counties for a total attendance of 73 000.

Approximately 18 000 students from 124 schools under the jurisdiction of nine boards of education participated in the programmes provided by the ROM museumobile driver interpreters. Both museumobiles were also involved in special events sponsored by Festival Ontario, a programme of the Ministry of Citizenship and Culture. The Fossil Museumobile was visited by over 4000 people at the Gloucester Fair in Ottawa, and both museumobiles were on view at the Elliot Lake Uranium Festival and the Bancroft Gemboree.

1983 marks the tenth anniversary of the ROM Museumobile programme. Since the beginning, the museumobiles have made approximately 1200 community visits, visited almost 2000 schools throughout the province, and provided more than 600 000 people with access to the resources of the ROM.

Speakers' Bureau

During the year, the speakers' bureau provided 103 speaking engagements to thirty-nine communities throughout the province and approximately 5800 people attended these lectures.

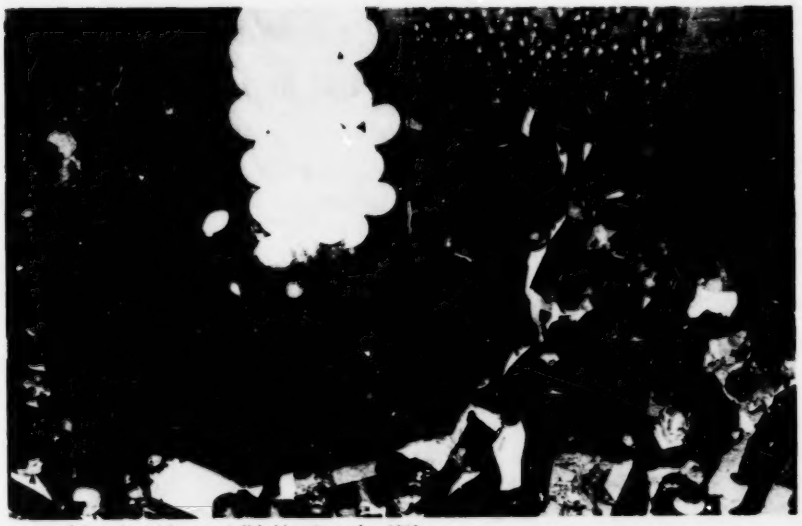
Grants

For the fiscal year 1982–83, Extension Services received grants from Outreach Ontario, a programme of the Ontario Ministry of Citizenship and Culture, and from the Core Funding Assistance Program of the National Museums Corporation. We express our appreciation for this assistance to our public programming service.

Members' Volunteer Committee

Betty Coatsworth

President



A view of the gala Celebration Ball held in December 1982.

The year's most important event was the reopening of the Royal Ontario Museum. The Museum had been closed for more than twenty months and during that period the Members' Volunteer Committee had been preparing for reopening; all volunteers were alerted to be on hand for that day, study programmes were designed to acquaint the members with the new surroundings, and a new script "Rediscover the ROM" was written for docent tours.

Our volunteers were enthusiastic and responded to all the Museum's requests for assistance. The response was overwhelming when a letter was sent to ROM members asking for volunteers to man the exhibitions *The Search for Alexander* and *Treasures from the Tower of London*. When 436 members answered, our volunteer lists swelled to 825. The staggering number of 70 663 volunteer hours was recorded for this twenty-sixth year of operation.

Special Projects

Last year the MVC pledged $500 000 to refurbish and renovate the Museum theatre. This has resulted in many special fund-raising projects. The highlight was the Celebration Ball held in December. After many months of planning, this elegant and festive occasion marked the reopening of the Museum. Many new friends were made, as was a profit of $76 500. In November the committee arranged the Lady Mary Soames lecture, "The Churchill Family Album". An afternoon tea and book-signing followed and $1400 was raised.

The *Treasures from the Tower of London* exhibition afforded an opportunity to stage a spectacular opening-night party with jesting, jousting, and juggling to complete the medieval theme. At this event $19 500 was netted. For the second year, the MVC was invited to assist the Canadian Antique Dealers Association with their annual fair, held at the St. Lawrence Hall in May; $6000 was donated. In May the MVC arranged a tour of the ROM for the wives of the Chase Manhattan Bank's international advisory board. A generous donation of $3000 was given to the committee.

Ongoing Activities

The travel programme acquired a new name and a new look. A logo was designed featuring a compass rose with "ROM Travel" superimposed. The travel committee planned and executed nine trips, four of which were in North America and five in such far-flung places as Iceland, Greece, Sikkim, and China. ROM Travel contributed donations of $44 700. ROMbus, the popular monthly bus tour, scheduled fourteen trips over the past year, ranging from "Who's Where?", a cemetery tour, to "Beyond Alexander", a visit to Toronto's Greek community.

Record numbers attended the Canadiana gallery luncheon tours, comprised of the fall series *Pioneers' Paintbrush* and spring series *The Colonial Tapestry*. Docents gave tours to prebooked groups viewing the special exhibitions or touring the Museum building. Our decorating committee decorated the galleries at openings, and produced profits from floral arrangements for outside groups renting Museum facilities.

All of these programmes enabled the committee to give a total of $160 000 toward our pledge; this brings monies given so far to $230 000.

During July and August, ROMwalk was the only programme in operation because the Museum was closed. Tours included the City Hall environs and old historic York. Volunteers assisted in a two-day August sidewalk sale, arranged by the ROM book and gift shop, that resulted in a $6000 profit for the shop. September found all volunteers engaged in reopening events, and from that time on, they have been on duty manning information and membership desks, conducting tours, helping in curatorial departments or serving in any capacity when asked by the Museum administration or the board of trustees.

The openings of special exhibitions were a particular challenge to the committee, for in a very short time the 825 volunteers had to be trained, assigned to exhibition areas, and ready to handle the flow of visitors. Scheduling the staff was an enormous task but the willingness of the workers made it possible. It was then that we realized we had a new type of volunteer — the exhibition volunteer — one we cherish and rely on for the future.

Our education programme consisted of study groups for the Member Volunteer Committee and Museum volunteers. This past year the subject chosen was "Silk Roads and China Ships" in preparation for the exhibition. The groups were divided to study four subjects relating to the period covered by the exhibition. Papers were written and given and in September 1983, selected ones will be presented at a colloquium.

Our permanent office was opened in March on level 4 of the terrace galleries. During the year the office had been located in three different areas — it was good to be home at last. Another landmark for the committee was the Bishop White Committee's request to become an associate member of the Members' Volunteer Committee as is the Textile Endowment Fund Committee. This request was accepted with pleasure.

First Magnitude and *Kites* dispense information each month to our MVC and Museum volunteers respectively. The archivist continues to keep up-to-date records of MVC affairs. All information is now on file in our office.

All is not work for the committee, for last June our social convener arranged for a bus to take us to Dr. James Cruise's farm for a delightful picnic luncheon and tour. Also in June, the MVC was involved in staging the second "Run for the ROM". The wonderful feeling of camaraderie between staff and volunteer that prevailed at the first annual "Run for the ROM" was repeated at the second event.

General meetings were held and, yet another first, the twenty-sixth annual meeting was held in the new members' lounge. Many lectures were given to the MVC by staff members prior to the special exhibition openings. These times afforded the volunteers a good chance to meet each other and become knowledgeable about the shows.

In June 1983 the ROM theatre seat sale began. The purpose is to sell the 306 seats at a cost of $1000 each. The success of this sale will mean that the MVC pledge for $500 000 will be complete!

Textile Endowment Fund Committee

The Textile Endowment Fund Committee continues to support the Museum's Textile Department by fund-raising, by assisting in making the department's staff and facilities known to the community, and by study and self-enrichment in the field of textiles. Individual members assist as volunteers in the department and lecture for the speakers' bureau on quilts and other textile topics. The committee is working on a commitment to stitch 1500 cotton drawer-liners for the department's storage drawers.

In 1982 the committee sponsored several well-attended lectures. In October 1982 Miss Tina Levy, keeper of textiles, Victoria and Albert Museum, London, spoke on 19th-century lace. In March 1983 two study sessions, "The Story of Samplers", were held in the Textile Department, with participants examining contemporary and antique samplers and learning about the department's resources and how to make use of them.

A handwork project "Magic Scraps" invited friends of the committee to submit cotton scraps for an appliqué quilt to be stitched by members. This and other handmade textile craft items will be featured at "A Country Christmas", a Textile Endowment Fund Committee event planned for December 1983.

With its earnings of the year 1982–83, the fund has acquired for the department a small but distinguished collection of Indonesian textiles including batik and embroidered panels. One of the items will be on display in the *Silk Roads · China Ships* exhibition.

Tomb cover, Sumatran, early 20th century, given by the Textile Endowment Fund Committee to the Textile Department.

Far Eastern Endowment Fund Report

The Bishop White Committee is a small group that has worked to establish a permanent and ever-growing fund for the Museum. Many new members have joined the Museum through the committee's efforts and a very solid interest has been created in the Far Eastern collection. While the Far Eastern Endowment Fund in Memory of Bishop White has been building, it has also contributed generously to the Bishop White gallery and to the Far Eastern Library, and has given several small pieces to the collection of the Far Eastern Department. The second payment of $10 000 towards a five-year pledge of $50 000 was given to the Museum in June 1983.

The committee was pleased to be welcomed into the Members' Volunteer Committee with the understanding that all monies raised by the Bishop White Committee will remain separate and will continue to augment the Far Eastern Endowment Fund. Mrs. Louise Stone, chairman of the Bishop White Committee, was invited to speak at the MVC general meeting 23 November 1982.

The fall lecture series entitled *The Inventive Chinese* dealt with engineering, architecture, porcelain, and silk. The lectures were related to the Ontario Science Centre exhibition, *China: 7000 Years of Discovery*. The series raised $1110.00.

A Christmas luncheon party for the Far Eastern Department staff was held in the Museum's new Far Eastern Library. It is always a happy occasion bringing together staff and volunteers.

The annual winter luncheon, held on 3 February 1983, at the Sai Woo Restaurant, raised $1953. Dr. Davidson Black spoke about his recent trip to China, where he visited old school friends in Peking and his boyhood home.

Receipts from the Friends of the Far East and Friends Forever totalled $8600. This special group of donors was invited to view private collections in Toronto in the spring of 1982 and the spring of 1983.

The assets of the Far Eastern Endowment Fund have reached $161 338, an increase of $13 620 over the year.

Museum Advisory Services

David A. Young

Head

The primary function of the Department of Museum Advisory Services is to develop and maintain an ongoing relationship between the ROM and sister museums and related institutions in the province, and to assist within the ROM's capabilities in the delivery of services to them. To achieve this rather formidable objective, the department calls upon the support of experts in virtually every department of the ROM, and acts as a liaison between these experts and the staff of museums across the province. The department also works in close cooperation with the Ontario Museum Association, the museum advisors in the Ministry of Citizenship and Culture, and with a number of other provincial and federal agencies and institutions.

A large number of Ontario's smaller museums are operated by volunteers and part-time staff often under the supervision of a single full-time curator who is responsible for every facet of the operation. Such curators seldom have time even to investigate the various forms of assistance available to them. To meet this basic need, the department last year sent to every museum in Ontario a statement of the kinds of services offered by the ROM. To follow up this first step, a programme of personal visits was established in order to see the problems first-hand and to communicate directly with the staff of other museums.

During the year, the department head has visited more than ninety museums in twenty-six different counties and regions of Ontario. Almost every kind and type of museum has been visited: historic houses, pioneer villages, national exhibition centres, community and county museums, children's museums, marine, military, agricultural, industrial, medical, sports, natural science, human history, and specialized museums.

As a result of these contacts, the department has received more than one hundred and fifty formal requests for assistance from Ontario museums. The bulk of these requests were for information about registration, exhibit design, and conservation, but there were also a number of requests to visit ROM curatorial departments to see the new facilities and discuss specific problems with the staff.

After its first full year of operation, the department has established a solid base for developing an ongoing rapport with the museum community, and for providing assistance that will help to create improved service to visitors to all Ontario museums.

A second responsibility of Museum Advisory Services is to coordinate and to improve the resources and services provided by the ROM to the francophone community. During the past year, the department provided consultation and referral to

all ROM departments in matters relating to French language services. Close to ten thousand words were translated for brochures, promotional material, signage, and general correspondence for ROM departments.

In addition, the department's bilingual secretary, Miss Diana Tyndale, narrated the French language Acoustiguide script for both major exhibitions: *Treasures from the Tower of London*, and *The Search for Alexander*. She also established a "Cercle Francophone" to give French-speaking ROM staff an opportunity to practise their language skills. Fifty-three staff members from twenty-four ROM departments joined the Cercle, which met every third week at lunchtime for informal discussions.

The department also established and maintained contact with francophone government agencies and community organizations in Toronto.

Programmes and Public Relations

Charles S. Tomsik

Head

The Museum was fortunate to be able to host two major exhibitions in this, the year of our reopening. *The Search for Alexander* (5 March 1983–10 July 1983) and *Treasures from the Tower of London: An Exhibition of Arms and Armour* (19 March 1983–19 June 1983) were enjoyed by both the membership of the Museum and an enlarged Museum public. Another feature of the year was *Images of the Wild/ Reflets de la Nature*, featuring the wildlife art of Ontario's Robert Bateman. This exhibition, organized by the National Museum of Natural Sciences, Ottawa, closed its popular cross-Canada tour at the ROM (29 January 1983–3 April 1983).

The following temporary exhibitions were also on view during 1982–83: an exhibition circulated by the Grey Art Gallery and Study Centre, New York University, *The Photography of Space Exploration*, in the McLaughlin Planetarium exhibit area (25 September 1982–6 February 1983); *Living Textures: Traditional Building Materials of the Islamic World* (24 September 1982–29 May 1983); an exhibition circulated by The Botanical Garden of the University of British Columbia, *Cloud Flowers: Rhododendrons East and West* (16 April–8 May 1983); and an exhibition circulated by the James Ford Bell Museum of Natural History, University of Minnesota, *Francis Lee Jaques and the Shape of Nature* (14 May–26 June 1983).

The upcoming year will see the opening of two major exhibitions, *Silk Roads · China Ships* opening on September 10 and, in celebration of the Province of Ontario's bicentennial, *Georgian Elegance and a New Land: 1745-1820*. *Silk Roads · China Ships* will tour North America as the ROM's first international travelling exhibition. *Silk Roads · China Ships* was made possible by generous grants from the American Express Foundation.

The department organized all Museum openings and receptions and coordinated the use of Museum premises by outside groups.

Colourful banners for the special exhibitions were hung at the Museum entrance and from light poles on sections of Bloor Street and Queen's Park. (Photo: Brian Boyle)

Programmes

The newly refurbished ROM theatre was the scene of many events organized by the programmes section, including a fund-raising concert by Mary O'Hara, a performance by the Dallas Youth Orchestra, film screenings, children's theatre, lectures, readings, and demonstrations. Outside groups also rented the theatre for events.

Every Sunday throughout *The Search for Alexander* exhibition, traditional Greek arts and crafts were displayed by the Greek Community of Toronto, Inc. and the Pan Macedonian Association of Ontario. Also in conjunction with *Search*, a one-day symposium was organized.

For both major exhibitions, the programmes section arranged a series of films and concerts, and also a special lecture series for *Treasures*.

The programmes section is staffed by Ms Ellen Davidson, manager; Ms Daphne Mackenzie, officer; and Mr. Kevin Lenard, now on a short term contract and originally on a student work term.

The department is also responsible for the front desk of the Museum, a central point for general enquiries. The front desk staff answer visitors' questions about the galleries, and about services in the ROM and its environs. During the year, Miss Andrea Neale supervisor/visitor services, began compiling a resource book on Museum-related information.

Audiovisual Services played a significant role in the design, installation, and maintenance of the audiovisual components for the *Search* and *Tower* exhibitions. Several students operated the *Search* multi-image show during evening and weekend hours. Mr. Richard Watters, audiovisual coordinator, provided technical assistance with the oral history recording project, gallery maintenance of audiovisual equipment, film programming, stage lighting design and operation, and projection and public address support.

Public Relations

The past year has been a most exciting period for the Museum and for the public relations section of the department responsible for communicating with its audiences. After months of preparation, the Museum reopened its front door on 24 September 1982. In collaboration with R.T. Kelley Inc., a campaign was developed around the theme "What a Place" with the ever-present popcorn vendor as spokesman. The campaign included posters in the subway, newspaper ads, and a delightful series of radio commercials.

Prior to its reopening, a decision was made to update our communication to our members. Mrs. Colleen Morris, who also applies her skills as editor writer to the *Annual Report*, developed the new membership brochure *Atria*, which has been well received not only by our members, but also by other museums as a model for communicating with their memberships.

The public relations section, under the supervision of Mrs. Stephanie Orange, public relations manager, developed the media plans for the two exhibitions *The Search for Alexander* and *Treasures from the Tower of London*. Months of planning brought the desired results as Toronto became aware of these international exhibitions. For the first time the Museum hung colourful 12-m-long banners at the main entrance and decked sections of Bloor Street and Queen's Park street poles with banners brightening up the wintery March scene. Subway posters, magazine and newspaper ads, and a campaign of dramatic radio commercials were also released. Local shops joined the promotion by decorating their windows with exhibition posters. A high level of awareness was achieved not only in Ontario but also in the Quebec market.

The public relations section also worked with the City of Toronto on banners for Yonge Street. Twenty-eight colourful banners representing ROM curatorial departments, designed by Miss Alyson Hannas of Publication Services, were hung this spring and summer along Yonge Street in a continuous effort to create awareness of the ROM before the public.

The reopening of the main building set the scene for a busy year of media activities. Advance stories were placed with the major daily papers. Through the help of Exhibit Design Services, Mrs. Audrey Ellard, media relations officer, and her assistant, Ms Penny Francis, arranged several sneak previews for key media representatives. The reopening received national radio and television coverage and congratulatory editorials from Toronto's two largest daily papers. Feature articles ran in several magazines, including *Canadian Geographic* and *Maclean's* and the *Canadian Collector* devoted the whole July August 1982 issue to the ROM.

The Search for Alexander and *Treasures from the Tower of London* also provided us with wide national coverage. Each press preview was attended by more than a hundred Canadian media representatives as well as upper New York State television crews. Objects in each exhibition were featured on national television programmes and both exhibitions were promoted by CITY TV as "Pick of the Week". A month-long series of interviews about *The Search for Alexander* on the CBC's radio programme "The 4 to 6 Show" was the most extensive promotion that the CBC had ever undertaken for any Toronto exhibition.

The discovery of mastodon remains last summer made Miss Arlene Reiss an overnight media star while more recently Mr. Enno Busse shared centre stage with one of our Chinese Ming tomb sculptures in a photograph run in twelve Canadian daily papers. Radio interviews were arranged with McLaughlin Planetarium staff and with other ROM staff on various aspects of more regular Museum work. Features such as these, with ongoing magazine and newspaper listings, and public service announcements about such events as The Saturday Morning Club and the continuing education lectures maintained a high profile for the institution. During the past year radio station CFRB alone aired 172 public service announcements, the equivalent of $25 800 worth of paid advertising.

The media relations section organized the filming of the Chinese wall painting conservation project, which will be shown during the coming year on the CBC TV's "The Nature of Things".

Good news cannot be created without support. The assistance of everyone in the ROM, especially those who provided leads to a Museum story, Exhibit Design Services, the Conservation Department, and the security officers is gratefully acknowledged.

Graphics Programme

ROM black-and-white photographs, colour slides, and transparencies are available to the public through the ROM graphics programme. Photos were sent around the world to fill the requests of many individuals, researchers, and book and magazine publishers.

Publication Services

John Campsie

Head

Much of the department's editorial and production capacity during the first six months of 1983 has been taken up by the effort to compile, design, and produce the book to accompany the *Silk Roads · China Ships* exhibition in what has seemed an impossibly short space of time. The brunt of this effort has been borne by Miss Mary Terziano, editorial coordinator, who has worked wonders in the race against the calendar.

Production

The 1982–83 year has seen the publication of several major works. Notable among these was K. Corey Keeble's *European Bronzes in the Royal Ontario Museum* and the second volume of David Pendergast's monumental *Excavations at Altun Ha, Belize, 1964–1970*. The publication of both books was assisted by grants, for the former from the Canadian Federation for the Humanities, for the latter from the Social Science Federation of Canada. History, Technology, and Art Monograph 4, *The Influence of Ottoman Turkish Textiles and Costume in Eastern Europe*, by the late Veronika Gervers, also reached publication.

Two titles were published in the life sciences programme: *Breeding Birds of Ontario: Nidiology and Distribution, Volume 1: Nonpasserines* by George K. Peck and Ross D. James, and Life Sciences Contribution 136, *Late Palaeozoic Species of Ellisonia (Conodontophorida): Evolutionary and Palaeoecological Significance* by Peter H. von Bitter and Glenn K. Merrill. The latter work was the first to be produced in the new format of the series.

The latest publication in our museology series, *The Royal Ontario Museum Statement of Principles and Policies on Ethics and Conduct*, appeared in September 1982 and was reprinted during the year.

Other publications of 1982–83 were the catalogue supplement for the exhibition *The Search for Alexander*; the wall chart *Ancient Egyptian Ships* by N.B. Millet and D. Champion; and Archaeology Paper 2, *The Study of Prehistoric Sacred Places: Evidence from Lower Manitou Lake*, by Brian Molyneaux. Ten titles from our back list were reprinted.

The department produced for other departments 295 new miscellaneous print jobs, many designed in-house, and 99 reprints of former jobs. These items varied from the Yonge Street banners to material for the two major exhibitions of early summer 1983.

Rotunda

With Volume 15, No. 3, paid commercial advertising was introduced into *Rotunda*. *Rotunda* has been conducting its own promotional campaign and as a result of new outside subscriptions, the growth in Museum membership, and newsstand sales, the circulation has increased from 7000 to 12 700 during the year ending in spring 1983. *Rotunda* has been accepted as one of the magazines, of a group of fifty, eligible for the Wintario Halfback programme.

Sales, Promotion, Marketing

A vigorous advertising effort conducted by Ms Lynne O'Brien, advertising and promotion coordinator, and the reopening of the ROM shop have resulted in a net increase of 11.5 per cent in sales over last year. The total of book orders processed by Miss Isabelle Hambleton, services coordinator, was 3824.

Flyers for each major new publication were sent to selected mailing lists, and for the first time a special catalogue for schools was sent out to more than 12 000 Canadian schools.

Displays of ROM publications were mounted at a number of meetings and conventions, including the Canadian Booksellers' Association convention in Toronto in July 1982; the Ontario Museum Association's annual conference in Peterborough in September; the Ontario Library Association's annual conference in Toronto in November; and the Canadian Museums Association's annual conference in Saskatoon in May. In addition, books and brochures were sent for display to many other conventions and conferences to which we could not send a representative of our own.

Publication Services has become a participant in the Canadian Telebook Agency, which makes bibliographic data available to booksellers, librarians and others in microfiche form.

Conferences, Workshops, and Seminars

Ms Jean Lightfoot, graphic artist, attended a three-day design course at York University in September 1982, and Ms Lorna Hawrysh, assistant editor/production, enrolled in a ten-session evening course in printing processes at George Brown College. Mrs. Jill Hawken, editor, attended a one-day seminar in electronic editing and typesetting systems, and Ms O'Brien a seminar on promotion planning, both organized by the Canadian Book Publishers' Council.

One of the ROM banners, designed by Ms Alyson Hannas of Publication Services, decking the Yonge Street light poles.

Mr. John Campsie, head, attended a management workshop organized by the Society for Scholarly Publishing in Williamsburg, Virginia, in September 1982, and also the SSP's annual meeting in Philadelphia in May 1983. Miss Terziano attended an SSP seminar on editorial costs in November 1982; and Mr. Hugh Porter, production coordinator, represented the department at the annual meeting of the Canadian Book Publishers' Council in Niagara-on-the-Lake in January.

As in former years, Mr. Campsie conducted a half-day seminar on museum publishing for students in the Museum Studies Program of the University of Toronto.

Awards

Ms Alyson Hannas, graphic artist, was awarded first prize in the publicity and promotion category of the 1983 Design Awards of the Ontario Association of Art Galleries for a teachers' kit on *The Search for Alexander* exhibition. *European Bronzes in the Royal Ontario Museum* won an honourable mention in the 1983 Museum Publications Competition of the American Association of Museums. The book was designed by Miss Terziano, the jacket by Ms Lightfoot.

Personnel

Almost immediately after returning from his 1982 summer vacation, Mr. Porter underwent major surgery and we were without his services for nearly five months. During this period the assistant production coordinator, Ms Francesca Terrell, left, as previously planned, to pursue a freelance career. Her successor, Ms Hawrysh, held the breach in the production department in admirable fashion until the pressure was relieved by the return of Mr. Porter, now fully restored to health.

Other Activities

Ms Barbarann Ruddell, department secretary, undertook the task of organizing the ROM Tortoises' team in the "Run for the ROM", and managed it with great efficiency. Both she and Mr. Campsie participated as members of that team.

Administration and Facilities

C.G.G. Bristowe

Assistant Director

The organization of a large business exists to support the ROM's specialized activities of research, collection, and education. The office of the assistant director for Administration and Facilities is responsible for the activities common to all business — personnel, accounting, and financial management — as well as for operations especially important to a museum — security, environmental conditions, building maintenance, and overseeing the shops and restaurants. Another area of responsibility is the provision of budget and financial information to the Ministry of Citizenship and Culture for the Museum's operating grant.

Accounting Department
Wm. Takaki, head
The Accounting Department, which includes payroll, budgeting, inventory, and computer services, manages the day-to-day financial activities of the ROM. For a detailed summary of operations for 1982–83, please refer to the auditors' report.

Physical Plant
E. Ralph Baker, head
The Physical Plant Department is responsible for maintenance of the building and its systems — environmental control and security — which require staff twenty-four hours daily. The department also provides housekeeping services, coordinates mail and photocopying services, and maintains the Museum's fleet of twenty vehicles. These services, as well as security, extend to the Sigmund Samuel Canadiana Building.

Mr. Ralph Baker, head, was also responsible for negotiating the collective agreement with the Service Employees' International Union.

Personnel Services
Larry R. Allen, head
The Personnel Department is responsible for all areas of employee relations within the Museum. These include labour relations, recruitment, salary administration, and employee records and benefits.

In 1982–83, 147 positions were filled and more than 2700 applications for employment and 2540 applications for the twenty-five provincially funded summer-student positions were processed.

The department assisted in the negotiation of collective agreements with the Ontario Public Service Employees' Union and the Service Employees' International Union.

A view of the new ROM Shop.

Book and Gift Shops
Sophia Stepovy, manager
The elegant new ROM shop, 2323 m^2 of warm wood, shining glass, and chrome, opened on 24 September 1982 with a wide variety of publications, jewellery, gifts, and stationery drawn from all over the world. Products range from a serene Buddha figurine to a dinosaur that glows in the dark. A line of ROM reproductions, exclusive designs, and adaptations from the collections has been introduced. Wholesale, mail order, and corporate accounts operations have been developed. The Little Shop, just off the lower rotunda adjacent to the theatre and group entrance, has been stocked with merchandise appropriate for children, and is to open in late summer 1983. Special shops for the 1983 exhibitions were set up and shops for future shows are being planned.

In providing products that express the cultural and educational purposes of the Museum, the shop staff frequently ask members of various ROM departments to evaluate possible merchandise and to provide the information that accompanies many of the items.

The response from shop visitors has been warm and the result of the first year's operation has been very encouraging.

Food Services
In September 1982, the Museum contracted Rill Food Services Ltd. to operate the Café ROM, the cafeteria on the main floor. Rill also provides the food services in the members' lounge and catered the year's various receptions and openings at the Museum.

Auditors' Report

To the Trustees of
The Royal Ontario Museum:

We have examined the balance sheet of The Royal Ontario Museum as at June 30, 1983 and the statements of financial operations of the operating fund, trust funds and renovation and expansion fund for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances, except as noted in the following paragraph.

Bequests, grants to trust accounts, and donations, by their nature are not susceptible to complete audit verification. Accordingly our verification of receipts from these sources was limited to a comparison of recorded receipts with bank deposits.

In our opinion, except for the effect of any adjustments which might have been required had we been able to completely verify bequests, grants to trust accounts and donations, these financial statements present fairly the financial position of the Museum as at June 30, 1983 and the results of its operations for the year then ended in accordance with the accounting principles described in note 1 applied, except for the change in the method of accounting for gifts received as explained in note 1(e) to the financial statements, on a basis consistent with that of the preceding year.

Clarkson Gordon

Chartered Accountants
Toronto, Canada,
September 2, 1983.

The Royal Ontario Museum

(Incorporated by Special Act of the Ontario Legislature as a corporation without share capital)

BALANCE SHEET

JUNE 30, 1983 (with comparative figures as at June 30, 1982)

ASSETS

	1983	1982
Operating Fund		
Cash	$ 798,157	$2,057,207
Short-term investments and accrued interest (at cost, which approximates market value)	144,341	187,885
Marketable securities, at cost (quoted market value: 1983 — $744,889; 1982 — $1,872,731)	595,080	2,070,790
Accounts receivable	324,746	70,487
Amounts due from Renovation and Expansion Project Fund (note 7)	1,132,426	
Inventories	475,308	200,069
Prepaid expenses	51,734	31,642
Excavation, fieldwork and travel advances	53,483	26,069
Deferred costs on special exhibitions (notes 1(a)(i) and 2(c))	741,570	
Fixed assets, at nominal value —		
Land and buildings	1	1
Collections and contents	1	1
	$4,316,847	$4,644,151
Trust Funds		
Cash	$ 512,699	$ 369,384
Short-term investments and accrued interest (at cost, which approximates market value)	124,523	249,130
Marketable securities, at cost (quoted market value: 1983 — $1,831,587; 1982 — $1,382,866)	1,634,578	1,571,232
	$2,271,800	$2,189,746
Total operating fund and trust funds	$6,588,647	$6,833,897
Renovation and Expansion Project Fund		
Cash		
Short-term investments and accrued interest (at cost, which approximates market value)		$ 69,653
Prepaid expenses and other assets		34,530
	$ Nil	$ 104,183

On behalf of the Board:

Edwin A. Goodman, Trustee

J. E. Cruise, Trustee

(See accompanying notes)

LIABILITIES AND FUND EQUITIES

	1983	1982
Operating Fund		
Accounts payable and accrued liabilities	$1,474,803	$1,087,467
Operating grants received in advance	1,118,215	134,673
Repayable Grant from Province of Ontario (note 6)	450,000	
	3,043,018	1,222,140
Fund balance (deficit):		
General	94,214	354,274
Special exhibitions	(798,486)	
Restricted (note 3)	1,978,101	3,067,737
	1,273,829	3,422,011
	$4,316,847	$4,644,151
Trust Funds		
Accounts payable and accrued liabilities	$ 386	$ 33,261
Fund balance (note 3)	2,270,914	2,156,485
	$2,271,800	$2,189,746
Total operating fund and trust funds	$6,588,647	$6,833,897
Renovation and Expansion Project Fund		
Bank indebtedness	$4,819,767	$1,631,212
Accounts payable and accrued liabilities	137,335	962,283
Construction holdbacks payable	35,673	2,137,435
Amounts due to Operating Fund (note 7)	1,132,426	
	6,125,201	4,730,930
Fund balance (deficit)	(6,125,201)	(4,626,747)
	$ Nil	$ 104,183

(See accompanying notes)

STATEMENT OF FINANCIAL OPERATIONS

Operating Fund

YEAR ENDED JUNE 30, 1983

(with comparative figures for the year ended June 30, 1982)

	1983				1982
	General		Restricted	Total	Total
	Operations	Special Exhibitions			
Revenues:					
General —					
Province of Ontario grants	$12,410,799			$12,410,799	$10,298,500
National Museums of Canada grant	176,000			176,000	176,000
Admission fees — General	498,315	$ 898,065		1,396,380	
— Planetarium — General	275,999			275,999	216,748
— Laserium	88,437			88,437	105,962
Catalogue sales		76,428		76,428	
Investment income	193,736			193,736	324,679
Museum studies fees	2,000			2,000	3,100
Education and Communication programmes (net)	125,565			125,565	56,293
Cafeteria income	55,001			55,001	
Other	38,750	14,782		53,532	27,463
Restricted —					
Donations (note 1(e))			$ 402,121	402,121	754,200
Grants			245,751	245,751	304,148
Investment income			445,796	445,796	352,247
Membership fees			237,416	237,416	112,372
Publications			139,405	139,405	119,130
Professional services			246,974	246,974	165,197
Other			36,885	36,885	161,468
Total revenues	13,864,602	989,275	1,754,348	16,608,225	13,177,507
Expenditures:					
Salaries, wages and benefits (note 5)	10,336,555	153,228	244,765	10,734,548	8,957,971
Special exhibitions production and construction		462,018		462,018	
Artifacts and specimens (note 1(e))			488,155	488,155	917,319
Building maintenance and utilities	1,128,010			1,128,010	618,426
Rent and storage	66,968		3,303	70,271	247,202
Equipment	242,613	11,141	210,457	464,211	387,415
Gift shop operations (net)	32,430	(435)		31,995	93,351
Catalogue expenses		201,312		201,312	
Supplies	457,956	13,495	65,568	537,019	468,977
Excavations and field work	143,531		149,505	293,036	308,488
Gallery maintenance	26,387			26,387	77,489
Purchased services	898,863	241,610	64,271	1,204,744	680,447
Travel	184,590	75,372	37,892	297,854	237,243
Exhibit design and fabrication	87,699	93,175	3,263	184,137	221,533
Books and periodicals	100,930			100,930	97,248
Publications	31,556		178,999	210,555	256,442
Advertising and publicity	363,451	422,023	73,205	858,679	276,474
Royalties		59,757		59,757	
Other	123,623	22,365	7,067	153,055	130,966
Total expenditures	14,225,162	1,755,061	1,526,450	17,506,673	13,976,991
Excess (deficiency) of revenues over expenditures	(360,560)	(765,786)	227,898	(898,448)	(799,484)
Transfers between funds (note 2)	100,500	(32,700)	(1,317,534)	(1,249,734)	(227,231)
Fund balance, beginning of year	354,274		3,067,737	3,422,011	4,448,726
Fund balance (deficit), end of year	$ 94,214	$ (798,486)	$ 1,978,101	$ 1,273,829	$ 3,422,011

(See accompanying notes)

STATEMENT OF FINANCIAL OPERATIONS

Trust Funds

YEAR ENDED JUNE 30, 1983

(with comparative figures for the year ended June 30, 1982)

	1983	1982
Revenues:		
Bequests, grants, and donations	$ 9,264	$ 41,967
Investment income	237,117	177,011
Other	2,522	20,485
Total revenues	248,903	239,463
Expenditures on behalf of the Museum	134,474	76,595
Excess of revenues over expenditures	114,429	162,868
Fund balance, beginning of year	2,156,485	1,766,386
	2,270,914	1,929,254
Transfer from restricted operating funds (note 2)		227,231
Fund balance, end of year	$2,270,914	$2,156,485

The trust funds consist of the following:

- The Archaeological Endowment Fund
- Colin Gordon Fund
- Elizabeth B. G. MacDonald Fund
- The Far Eastern Endowment Fund
- R. S. McLaughlin Planetarium Endowment Fund
- Textile Endowment Fund
- The Veronika Gervers Memorial Research Fund

(See accompanying notes)

STATEMENT OF FINANCIAL OPERATIONS

Renovation and Expansion Fund

(Including the Gallery Development Fund — see note 4)

YEAR ENDED JUNE 30, 1983

	Cumulative balance June 30, 1982	Receipts and expenditures during the year	Cumulative balance June 30, 1983
Revenue:			
Bequests, grants and donations	$ 8,232,721	$ 999,955	$ 9,232,676
Province of Ontario grants	9,150,000		9,150,000
Financing provided by The Ontario Universities Capital Aid Corporation (note 4)	3,600,000		3,600,000
Province of Ontario grant in lieu of Federal assistance	11,000,000		11,000,000
Province of Ontario grant	2,000,000	1,000,000	3,000,000
Wintario	10,338,000		10,338,000
Special Wintario grant for handicapped facilities	125,000	293,445	418,445
Chinese Exhibition grant	150,000		150,000
Municipality of Metropolitan Toronto	1,912,500	850,000	2,762,500
National Museums of Canada grant	174,000		174,000
Revenues from special events (net)	186,283	8,093	194,376
Members' Volunteer Committee	257,210	159,244	416,454
Run for the ROM		83,837	83,837
Interest	1,449,962		1,449,962
	48,575,676	3,394,574	51,970,250
Less — campaign costs	(474,507)	(148,000)	(622,507)
— interest costs	(216,045)	(459,552)	(675,597)
	47,885,124	2,787,022	50,672,146
Renovation and expansion expenditures (note 4):			
Building	50,085,008	3,803,399	53,888,407
Gallery Development	2,426,863	1,909,090	4,335,953
	52,511,871	5,712,489	58,224,360
	(4,626,747)	(2,925,467)	(7,552,214)
Transfers between funds (note 2(b))		1,427,013	1,427,013
Fund balance (deficit)	$(4,626,747)	$(1,498,454)	$(6,125,201)

(See accompanying notes)

Notes to Financial Statements

JUNE 30, 1983

1. **Summary of accounting policies**

The financial statements of The Royal Ontario Museum have been prepared by management in accordance with accounting policies generally followed by similar organizations. The following summary of these accounting policies is set forth to facilitate the understanding of these financial statements.

(a) Fund accounting —

In order to ensure observance of limitations and restrictions placed on the use of resources available to the Museum, the accounts of the Museum are maintained in accordance with the principles of fund accounting. Accordingly, resources for various purposes are classified for accounting and reporting purposes into funds that are held in accordance with the objectives specified by the donors or in accordance with directives issued by the Board of Trustees. Transfers between funds are made when it is considered appropriate by the Board of Trustees. For financial reporting purposes, the funds have been classified into three fund groupings as follows:

(i) Operating fund — The operating fund includes the ordinary day-to-day operating transactions of the Museum, special exhibitions and certain amounts received by the Museum or designated by the Board of Trustees to be restricted to certain expenditures of a current operating nature. Special exhibitions are those involving special expenditures for which a specific admission fee is charged. Costs of such exhibitions are deferred until the exhibitions are opened to the public.

The operating restricted funds include the following:

(a) Current restricted funds — Expendable funds received whose use is restricted by the donor for special purpose expenditures of a current nature.

(b) Board designated funds — Expendable funds for general or special purposes which have been set aside in accordance with directives issued by the Board of Trustees from time to time. Revenues earned from certain auxiliary activities (memberships, publications, and cross-appointment teaching) are also included as directed by the Board of Trustees. In addition, expendable bequests, grants and donations and investment income from non-restricted funds from donors are included in this category.

Reference is made to note 3 for details of these accounts.

(ii) Trust funds — These include the total amounts received and the total amounts expended whose use is restricted in accordance with objectives as specified by the donors. These trust funds consist of capital funds received which are non-expendable, together with the unexpended income thereon. Reference is made to note 3 for details of these accounts.

(iii) Renovation and expansion project fund — These include all amounts received and expended that relate to the Museum's present project of major renovations to, and expansion of, its existing facilities (see note 4).

(b) Basis of recording operating and trust fund receipts and expenditures —

The Museum follows the accrual basis of accounting. Operating and trust fund income is recorded when earned, and expenditures are recorded when materials are used or services rendered. Sustaining donation revenue and current restricted funds are, however, included in revenue as received.

(c) Inventories —

Inventories, which consist mainly of publications, book and gift shop items for resale, and supplies, are stated at the lower of cost and net realizable value.

(d) Marketable securities —

Investments are recorded in the accounts at cost. The gain or loss on the sale of securities is based on the average carrying value of the securities sold. Interest income is recorded on the accrual basis as earned.

(e) Fixed assets —

The land and buildings, and collections and contents, are each carried in the accounts at a nominal value of $1. Construction costs incurred during major renovation and expansion projects are written off. Accordingly, no depreciation is recorded in the accounts.

Commencing in fiscal 1983, artifacts and specimens which are acquired by gift during the year are included in the operating fund statement of financial operations as donation revenue at their estimated appraisal values (1983 — $373,332; 1982 — $754,200). The excess of the appraised value of the gifts received over their nominal value is expensed in the year. Prior years figures have been restated to reflect this change in accounting policy.

(f) Renovation and expansion project revenue and expenditures —

Capital campaign pledges and grants related to the Museum's renovation and expansion project are recorded when received. Expenditures are recorded as incurred.

2. **Fund transfers**

During the 1983 fiscal year, with Board approval, net transfers totalling $1,317,534 were made from operating restricted funds. These consist of:

(a) Accumulated investment income of $100,500 (1982 — $230,493) was transferred from Board designated operating restricted funds to be applied against general operating expenses of the Museum for the 1983 fiscal year.

(b) Accumulated fund balances of $1,427,013 were transferred from Board designated operating funds to be applied against the building portion ($371,700) and the gallery development portion ($1,055,313) of the renovation and expansion project. These transfers enabled the building portion of the project to be fully funded (note 4).

(c) In fiscal 1982, special exhibitions costs of $32,700 and special exhibitions deferred costs of $177,279 were financed from restricted operating funds. It has been decided that special exhibitions should be included as a separate category in the operating fund, and accordingly these amounts are restored to restricted funds in 1983.

3. Operating restricted funds and trust funds

A summary of the changes in the various operating restricted and trust account fund balances for fiscal 1983 is as follows:

	Balance June 30, 1982	Add receipts	Deduct expenditures	Transfers (note 2)	Balance June 30, 1983
Operating restricted funds					
Current restricted	$ 90,416	$ 255,302	$ 209,333	$ (7,197)	$ 129,188
Board designated	2,977,321	1,499,046	1,317,117	(1,310,337)	1,848,913
	$3,067,737	$1,754,348	$1,526,450	$(1,317,534)	$1,978,101
Trust funds					
Restricted endowment					
— capital	$1,311,014			12,052	1,323,066
— unexpended income	845,471	248,903	134,474	(12,052)	947,848
	$2,156,485	$ 248,903	$ 134,474	$ Nil	$2,270,914

4. Renovation and expansion project and related Province of Ontario and other financing

At June 30, 1982, the estimated costs to complete the renovation and expansion project amounted to approximately $62,000,000, including approximately $1,000,000 of desirable additions to the project. Since the commencement of the project there has been a very substantial general increase in construction and other costs. The Museum had made certain modifications to the project in order to limit the impact of this inflation. During fiscal 1983, the Museum decided that a number of the additions were not feasible at this time, with the net result that total project costs are now estimated to amount to approximately $61,000,000.

The building portion of the renovation project is now substantially complete and, as a result, the Board of Trustees approved its completion at a cost of $54,750,000. In order to ensure the ongoing design and installation of galleries, the Board approved the creation of the Gallery Development Fund and segregated the project costs into building and gallery development.

As at June 30, 1983, $4,335,953 had been expended on the initial phases of the gallery development, which had planned budgeted costs of $6,250,000. Projected costs for additional phases of gallery development are not available since the planning for these phases has not yet commenced.

Compared to the current estimated total project costs of $61,000,000, the Museum will need to obtain significant funding in addition to the $55,126,632 already pledged or committed in order to complete the gallery development. Sources of additional funding are being actively pursued by the Board.

Amounts received to July 15, 1983 total $52,099,159, leaving a balance of existing commitments and pledges of $3,027,473 to be received from the following sources:

Municipality of Metropolitan Toronto matching grant	$2,025,000
Bequests, grants and donations	927,618
Special Wintario grant for handicapped facilities	66,855
National Museums of Canada grant	8,000
	$3,027,473

The matching grant offered by Metropolitan Toronto is being funded over a 7-year period based on 50¢ of each dollar of private sector donations up to a maximum grant of $5,000,000.

Included in the amounts received to date is $3,600,000 from The Ontario Universities Capital Aid Corporation, which until March 31, 1979 was the source of Province of Ontario capital funds provided to the Museum. In connection with this receipt, the Museum has issued debentures to The Ontario Universities Capital Aid Corporation which are repayable over a 30-year period. Payments of debenture principal and interest are being made on behalf of the Museum by the Ministry of Citizenship and Culture of the Province of Ontario, under its related program of financial support for the Museum; accordingly, the principal amount of outstanding debentures (June 30, 1983 — $3,412,025; June 30, 1982 — $3,451,339) has not been recorded as a liability in the accounts.

5. Unfunded pension liabilities

The administrator of the pension plan covering the Museum's employees notified the Museum in fiscal 1980, that as a result of several factors, including the carrying forward of an initial past service liability, subsequent plan improvements and experience deficiencies in recent years, there is estimated to be a substantial unfunded past service pension liability. The Museum has provided, in fiscal 1980 for past service pension costs, an initial amount of $200,000. This provision was charged to 1980 current operating expenditures and is included in operating liabilities at June 30, 1983 and 1982. The Museum is conducting for its own account an independent actuarial review of this liability. Pending the outcome of the review, no further provision for past service pension costs has been included in 1983 and 1982 current operating expenditures. The accounting policy with respect to pension costs will be determined after the completion of the review.

6. Repayable Grant from Province of Ontario

In 1983, the Museum received a $450,000 repayable grant from the Province of Ontario to assist in the initial funding of a major exhibition for the 1984 Bicentennial, entitled "Georgian Elegance and a New Land." The grant is repayable from proceeds of the exhibition.

7. Interfund Loan to Renovation and Expansion Project

At June 30, 1983, the renovation and expansion project fund had borrowed $1,132,426 from the operating fund and is charged interest at a rate equal to the average monthly prime lending rate of a Canadian chartered bank less 2½%.

8. Inflation Restraint Act

Under the Ontario government's Inflation Restraint Act, the Museum is subject to controls which limit increases in employee compensation until June 30, 1984.

9. Changes in financial statement presentation

Changes in presentation have been made in the financial statements and the comparative figures for 1982 have been reclassified to conform with the presentation adopted in 1983.

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